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THESIS

**APPLICATION OF AN OPERATIONAL AUDIT MODEL
IN A NOT FOR PROFIT HOSPITAL**

by

Constantinos M. Piperis

December 1993

Principal Advisor:

James M. Fremgen

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13528

94-08440



DTIC ON 1001
94 3 15 022

REPORT DOCUMENTATION PAGEForm Approved
OMB No 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204 Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)

2. REPORT DATE

December 1993

3. REPORT TYPE AND DATES COVERED

Master's Thesis

4. TITLE AND SUBTITLE

**APPLICATION OF AN OPERATIONAL AUDIT MODEL IN A NOT
FOR PROFIT HOSPITAL**

5. FUNDING NUMBERS

6. AUTHOR(S)

Piperis, Constantinos M.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Naval Postgraduate School
Monterey, CA 93943-50008. PERFORMING ORGANIZATION
REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSORING / MONITORING
AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.

12a. DISTRIBUTION / AVAILABILITY STATEMENT

Approved for public release, distribution is unlimited.

12b. DISTRIBUTION CODE

13. ABSTRACT (Maximum 200 words)

This thesis has examined the problems facing the not-for-profit sector and concluded that many relate to management deficiencies. One tool available to assist NFP managers is operational auditing. The author developed an operational audit model composed of four stages. The familiarization stage provides an overview of an organization and its operations. In the diagnostic stage, detailed questions are asked in order to identify specific practices and potential problems. In the critical evaluation and application stage, audit procedures are applied to problem areas identified. Finally, in the reporting stage the auditor presents findings and recommendations. This model was tested in an actual nonprofit hospital. Eleven specific problem areas were identified, and recommendations for improvement were offered. This test demonstrated that the audit model could be of significant help to a manager in improving the effectiveness and efficiency of his/her organization.

14. SUBJECT TERMS

Hospital, Operational Auditing, Not-For-Profit, Model

15. NUMBER OF PAGES

136

16. PRICE CODE

17. SECURITY CLASSIFICATION
OF REPORT
Unclassified18. SECURITY CLASSIFICATION
OF THIS PAGE
Unclassified19. SECURITY CLASSIFICATION
OF ABSTRACT
Unclassified

20. LIMITATION OF ABSTRACT

UL

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IN A NOT FOR PROFIT HOSPITAL**

by

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Lieutenant, Hellenic Navy
B.S., University of Thessaloniki, 1983**

Submitted in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

**NAVAL POSTGRADUATE SCHOOL
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ABSTRACT

This thesis has examined various problems facing the not-for-profit sector and concluded that many of these relate to management deficiencies. One tool available to assist NFP managers is operational auditing. The author developed an operational audit model composed of four stages. The familiarization stage provides an overview of an organization and its operations. In the diagnostic stage, detailed questions are asked in order to identify specific practices and potential problems. In the critical evaluation and application stage, audit procedures are applied to problem areas identified. Finally, in the reporting stage the auditor presents findings and recommendations. This model was tested in an actual nonprofit hospital. Eleven specific problem areas were identified, and recommendations for improvement were offered. This test demonstrated that the audit model could be of significant help to a manager in improving the effectiveness and efficiency of his/her organization.

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DTIC	TAB <input type="checkbox"/>
Unannounced	<input type="checkbox"/>
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ACKNOWLEDGEMENT

This thesis owes its generation to many people. I would like to especially thank my professor A.A. Tsaklanganos at Aristotle's University of Thessaloniki, who instilled the idea to me and gave me the impetus to start this effort.

Also, I would like to thank my principal advisor, professor J.M. Fremgen who inspired me with respect about his knowledge, and gave me his valuable directives in writing my thesis.

I owe grateful thanks to a special person and a good friend, my associate advisor, LCDR J.M. Nevels U.S.N., for his assistance and support.

It would be an unpardonable omission on my part, to not express my special thanks and appreciation to the Vice-President of finance and accounting department at Community Hospital Foundation (CHF), Mr. Will Bishop. Without him, this effort would never come into the light.

Also, I would like to express my thanks to Mrs. Lynn Boyle. This thesis owes its final format to her.

Lastly, but not least, I would like to thank my family; my wife Sofia and my daughter Helen, who always exhorted and encouraged me in writing my thesis.

I. INTRODUCTION

A. GENERAL

The United States economy can be regarded as made up of three main sectors, the private for-profit sector, the public (governmental) sector, and the private not-for-profit (NFP) sector (Weisbrod, 1978). This research will focus on the private NFP sector.

In the private for-profit sector, the profit is of paramount importance to business entities. In this sector, decisions made by managers are intended to increase profit, and success is measured by the amount of profit that an organization earns. The private business sector could be divided into small and large business. Examples of small business would be boutiques, service stations, etc. Examples of large business would be IBM, MacDonalds, etc.

The public sector is made up of governmental agencies at the municipal, state, and federal levels. Also categorized within the public sector is that group of business-like entities that are initially funded by governments, and then granted an objective of breaking even, e.g., the U.S. Postal System. The goal of this sector is to provide the society

with public goods¹ and services as the society considers appropriate.

The private NFP sector stands between what the private for-profit sector offers and what the public sector offers, with the need to protect and cover the needs of the constituency. According to Arrow (1979), the goods and services provided by the NFP sector cover the spectrum from purely private goods to purely collective goods. In these organizations, the decisions made by managers aim to provide the best goods and services with the available resources. The output is measured chiefly by how much service these organizations provide and by how well these services are rendered. Part of the NFP sector includes organizations that are just instruments of promoting profit maximization for their members, e.g., trade associations. Another part of the NFP sector offers collective kinds of goods or services, the same as those provided by the public sector. Among these would be charities and organizations with such aims as preservation of the environment or civil liberties, e.g., Green Peace, NAACP, etc. Then, between these two types, is a large number of NFPs, such as colleges, universities and private schools, hospitals, voluntary health and welfare organizations, churches and religious foundations, clubs and

¹A public or collective good is an economic good which can not be provided separately to each individual, and whose consumption by one person does not diminish the amount available for others. An example is National Defense (Friedman, 1989).

social organizations, etc. These categories are differentiated by purposes or functions or by sources and uses of revenues (Tsaklanganos, 1979).

According to B.A. Weisbrod (1978), the need for the goods and services offered by the NFPs is enormous. The gap between private goods and public goods has to be covered. The private sector provides goods to the extent that it is profitable to do so, while in the public sector a democratic society sets limitations on its leaders as to the amount and quality of collective goods and services its government can offer. The existence of the private NFP sector is due to its ability to meet other needs. It satisfies some of the public demand for collective goods that are unsatisfactorily dealt with by government, and it satisfies the consumer's demand for private goods that are not provided by the private sector. That is the basic significance of the NFP sector. (Weisbrod, 1978)

The size of the NFP section is significant. As of 1985, there were about 886,000 NFP organizations, and their aggregate total revenue was over \$796 billion. This equalled almost 20% of the revenue of all business firms in the U.S. (Weisbrod, 1988).

NFP organizations also employ about 30% of the nation's workforce. Table 1 shows the changes in the number of employees in NFPs over the decades 1970-1990, indicating that

TABLE 1
ESTIMATED EMPLOYEES IN NONPROFIT ORGANIZATIONS

	Number of Employees (millions)		
	1970	1980	1990
State and local government	2.6	4.9	4.1
Federal government	5.7	4.7	4.2
Health Services	4.4	7.3	7.9
Education	6.1	7.7	9.3
Welfare and religions	0.8	1.6	2.2
Other	<u>1.5</u>	<u>3.2</u>	<u>3.9</u>
Total Non-Profit	21.1	29.4	31.6
 Total employed	 81.8	 101.4	 122.5
Non-Profits as a percent of total	26%	29%	26%
Sources: U.S. Bureaus of Labor Statistics, Employment and Earnings, and U.S. Bureau of the Census, Public Employment, as reproduced in Statistical Abstract of the United States, 1982-1983, and 1992.			

health services and education employ the largest number of individuals (Anthony and Young, 1984). The reader can notice that only the federal government has seen a steady decline in the number of employees. Despite this, the federal government remains by far the largest single NFP in terms of total budget. The largest department in terms of employees is the Department of Defense, which in 1983 spent \$260 billion and had 3 million military and civilian employees. The Department of Health and Human Services spent more money (\$268 billion), mainly because of the sizable amounts it disbursed for transfer payments, such as those for welfare, social security, and research grants; however, it has far fewer employees (160,000). There are about 80,000 government units (e.g., states, municipalities, etc.) in the U.S. below the federal level (Anthony and Young, 1984).

In the U.S. today, there are more than 7,000 hospitals. Some 5,900 of these are general hospitals, widely referred to as community hospitals. Community hospitals represent three-quarters of total industry bed capacity and their expenditures of \$116 billion in 1983 represented 85% of the industry total. (American Hospital Association, 1983). Of these, about 1,700 are government-owned, and 800 are proprietary (investor-owned) hospitals. The remaining 3,400 general hospitals are voluntary NFP enterprises, which account for more than 70% of patient admissions and nearly 80% of the total assets of community hospitals (Seawell, 1987). Table 2 is a composite

TABLE 2
HOSPITALS BY TYPE OF OWNERSHIP

Government Ownership:

a. Federal

1. Army (Continental U.S. (Conus), Overseas)
2. Navy, Air Force, Veteran's Administration
3. Public Health Service (Indian Service, Marine Hospitals, etc.)
4. Department of Justice (Prisons)

b. State (Long-term psychiatric, chronic, and other State university medical school hospitals)

c. Local

1. Hospital district or authority
2. County
3. City/County
4. City

Non-Government Ownership:

a. Voluntary (Not for profit)

1. Church-affiliated (Roman Catholic, Salvation Army, Lutheran, Methodist, Baptist, Presbyterian, Latter-Day Saints, etc.)
2. Other (Community, Industrial, Kaiser Plan, Shriners', etc.)

b. Proprietary (For profit)

1. Individual owner
2. Partnership
3. Corporation (Single Chain)

Source: Longest, B.B., Jr., Principles of Hospital Business Office Management, Chicago: Hospital Financial Management Association, 1975.

of American hospitals by type of ownership. The operations of hospitals of all types are directed to the saving of lives, the healing of the sick, and the alleviation of suffering.

B. THE ESSENCE OF THE PROBLEM

Data continue to provide evidence that NFPs are faced with a problem. The problem is that a better job is done by the private for-profit and public sector in meeting the changing environment of the economy than by the NFP sector. The NFP sector--especially the small NFP--is most likely not to survive in the long run without crucial changes in direction and behavior. Hospital industry dynamics confirm this. From 1965 to 1984 for-profit hospitals increased their bed capacity by 115%, while the not-for-profit hospitals increased by only 12% (Foster, 1987).

Nonprofit's operating efficiency is inferior to for-profits, because there is a lack of business discipline among NFP hospital managers (Clarkson, 1972 and Clark, 1980). Additionally, research on market efficiency has found that for-profits respond more quickly to changes in the demand for care than NFPs (Kushman and Nockton, 1977). This finding has been supported by Frost and Sullivan (1982), who suggest that for-profits have "staffing controls highly responsive to demand, as well as controls to help limit the length of stay."

Since 1984, the situation has not changed. Inflation, unions, and increased demands for services cause problems for the NFPs (Herzlinger, 1979). The main problems are due to

poor management, poor fiscal controls, to be consistent and extreme government intervention (Henle, 1976 and Herzlinger, 1979).

The private for-profit sector has developed a system of enterprise having no parallel in the world. These enterprises are manned by managers trained in modern business techniques designed to make them more capable of making sound business and investment decisions that will help their companies to reach their objectives. Analyses of hospital management patterns have customarily predicted that for-profit hospitals will have management improvements before NFPs, because there are incentives to maximize profits, partly by reducing costs (Clarkson, 1972). A relatively recent statement of this proposition by Cook (1983) predicts that, on a cross-sectional basis, a significantly higher proportion of for-profits than NFPs will employ new management control strategies designed to reduce the cost of operations.

These strategies include, but are not limited to, such things as system analysis, human resources analysis, and auditing. The public sector also employs a large number of these strategies. The last sector to grasp the benefits of these modern techniques is the NFP sector (Borst and Montana, 1977). The bottom line is that major management concepts can and should be applied to NFP activities in the same painstaking way as to profit-oriented entities (Newman and Wallender, 1976).

It is not the purpose of this research effort to examine all modern business techniques which can help to improve small NFPs' performance. The author's goal is to focus only on auditing, especially the operational audit. For, if the operational audit is useful in the private for-profit and public sectors, it might also prove beneficial to managers of small NFPs.

C. OBJECTIVE

The objective of this research effort is to develop an operational audit model useful for a NFP institution and to test this model on a real life organization. For this reason, the Community Hospital Foundation (CHF) has been selected. The CHF is a private NFP facility which is located in Carmel, California. It is the sole parent of Community Hospital of Monterey Peninsula (CHOMP), Community Hospital Endowments (CHE), and Community Hospital Properties (CHP), all of which report with combined financial statements.

The CHF is composed of four departments. These departments include the Research and Planning, the Finance and Accounting, the Nursing Services, and the Administration departments. All of these are under the administrative and financial control of the hospital's Administrator (President)/CEO. For the purpose of this research effort only the Finance and Accounting department will be examined. The author placed himself in the role of the auditor and applied an operational audit model to this department of the hospital.

D. METHODOLOGY

Secondary sources were the basis for the background of this research. Data were collected from library journals, periodicals, and books. The author conducted a broad based literature search for information in several fields of concern. To begin with, a search of economic and management data was made in order to define and characterize a not-for-profit (NFP) organization. Next, data for the evaluation of the role of these organizations in the economy and their social context were collected. After this, accounting literature had to be reviewed to prove the need for an operational audit, how this type of audit came up, who was best able to carry it out, and what benefits are expected to arise from this type of procedure.

With data from these areas, the author focused the effort on the small NFP. Marrying the various sources and references, including eight years of experience as a Supply Officer in the Hellenic Navy, the author came up with an audit model aiming to satisfy the needs of and considerations crucial for a small NFP.

In the application of the model, the author put himself in the shoes of the auditor to perform an operational audit at an NFP hospital's department in accordance with the designed audit model stages. Many visits were made to the Community Hospital Foundation (CHF), Carmel, CA. In the on-site environment, discussions and interviews were conducted,

observations were made, and questionnaires were administered in accordance with the audit model stages. After having objectively evaluated the data obtained, the findings and recommendations were discussed in an exit interview with the VP of the finance and accounting department. The accounting department concurred with these findings and recommendations and a final report was submitted and released.

E. STRUCTURE OF THE THESIS

The remainder of this thesis is organized as follows: Chapter II discusses what NFP organizations are, their organizational characteristics, their economic significance in today's society, the similarities and differences between for-profit and not-for-profit organization, and the problems as well as the future of the NFP sector.

Chapter III examines the nature of operational auditing, and discusses the differences from the other types of audits. It argues the need for an NFP operational audit and discusses the qualifications that the auditor should have to perform the audit. Benefits, limitations, and applications of operational auditing are also discussed in this chapter.

Chapter IV presents the model developed for the small NFP. It outlines the four stages which make up the operational audit model. These stages are the familiarization stage, the diagnostic audit stage, the critical evaluation and application stage, and the reporting stage.

Chapter V introduces the Community Hospital Foundation (CHF) and presents data based on the application of the operational audit model to this real-life NFP. Its purpose is to test and demonstrate the practical usefulness of the model.

Finally, Chapter VI states the conclusions and recommendations for more effective and efficient application of the model.

II. NOT-FOR-PROFIT ORGANIZATIONS

The third sector of market institutions--the private not-for-profit (NFP) sector--is composed of organizations that are based largely on voluntary grants of money and of labor time to finance output. Their characteristic is their ability to meet the social needs of selective groups of society. This chapter will deal with the following questions:

- What are NFP organizations?
- What are their organizational characteristics?
- What is their economic importance?
- What similarities and differences exist between NFP and for-profit organizations?
- What are the main problems threatening their existence?
- What are the requirements for their future?

Since this research effort focuses on operational auditing in an NFP hospital, the author considered it appropriate to discuss some issues associated with those institutions.

A. DEFINITION

There are many names under which the reader may find NFP organizations. The most common names are "nonprofit", "philanthropic", "charitable", "nonbusiness", "donative", and "altruistic" (Weisbrod, 1978). Although there may not be a consensus on terminology, there is agreement about the essential distinguishing characteristic of all NFPs: "An NFP

is, in essence, an organization that is barred from distributing its net earnings, if any, to individuals who exercise control over it, such as members, officers, directors or trustees" (Hansmann, 1980). An NFP may make plans for and use an excess of revenues over expenses for any period, but the net income stemming from such excesses of revenues over expenses must be used to improve and expand its services. (Anthony and Young, 1984) Governmental entities, colleges and universities, many hospitals, and health and welfare agencies fall into this definition of NFPs.

In this research effort, NFPs will be distinguished in two ways. First, NFPs will be categorized in terms of public support. From this point of view, they are distinguished between voluntarily and nonvoluntarily supported institutions. Examples of voluntarily supported NFPs are hospitals, churches, private colleges, etc. Nonvoluntarily supported NFPs comprise governmental entities supported by tax assessments. (Henke, 1977)

Secondly, these organizations can be categorized in terms of the nature of support coming from their constituencies. For instance, some organizations, such as hospitals, are often expected to be self-sustaining in their normal operations, after getting an initial capitalization. Organizations that need full or partial operating support indefinitely belong to another group. Governmental units are supported by periodic tax assessments, and health and welfare agencies and other

organizations are supported by repetitive voluntary contributions (Henke, 1977).

In the United States, the tax laws specify that organizations classified as nonprofit are "organized for charitable or mutual benefit purposes" (Weisbrod, 1988). The classification is useful for two reasons. First, the determination of tax-exempt status gives a nonprofit organization some competitive advantage over for-profit firms offering the same services. Second, the Internal Revenue Service (IRS) makes available data it gathers on organizations so classified. (Weisbrod, 1988)

From this point on, this research will be dealing mainly with voluntary entities (NFPs). NFPs receive substantial portions of their financial resources from revenues coming from selling goods or rendering services. Hospitals financed by patient charges and all other not-for-profit organizations financed by user charges will be classified as voluntary NFPs.

Understanding what distinguishes NFPs from the private and governmental sectors of the U.S. economy helps further understand a definition of an NFP. There are three main differences between NFPs and the private and government sectors: first, the tax-exempt status of NFPs; second, the semipublic nature of their providing goods and services; and third, their sources of funds. Only the third of these is really successful in distinguishing NFPs from the other two sectors of the U.S. economy (Copeland and Smith, 1978).

B. ORGANIZATIONAL CHARACTERISTICS OF NONPROFIT ORGANIZATIONS

Within the limitations set by the legal and economic environments, the operating requirements of an entity mainly determine its organizational structure. This must be recognized by someone studying NFPs. (MacGrimmon, 1979)

The for-profit oriented firms are managed by people who have invested resources and they are looking for a satisfactory return on their investments. The more resources that a person invests, the higher his/her proportional participation in the management of an organization. Thus, business firms are managed by their owners directly, or indirectly through the elected board of directors.

Since the NFPs have no equity interests, the rights to their management and control should be established by different relationships. The membership in an NFP may carry a voting privilege regardless of the amount paid or contributed. For instance, someone may have one vote on governmental affairs or one vote on the affairs of a hospital. Control in these instances stands equally for each one despite the amounts contributed in the form of taxes or hospital pledges. (MacGrimmon, 1979)

Typically, these organizations are governed by boards elected or appointed in accordance with a charter or other legal documents. The number of members is not specified by statute. The board of directors or trustees, or governing board--depending on the purpose of the organization--is

usually composed of leading citizens who volunteer a considerable amount of their time. Even though they serve on a voluntary basis, under law the board members are charged with the fiduciary responsibility of approving the mission and scope of the organization, reviewing institutional activity, managing the organization's assets, and evaluating financial performance (Gross and Jablonsky, 1979).

The board of directors for an NFP is the policy-setting group. It is legally responsible for upholding the constitution and bylaws. As such, the policies established should meet the purpose or goal of the organization. Also, the board is responsible for deciding who is responsible for what within the organization and how the organization should conduct itself in the community (Fisher, 1978).

In a hospital, the overall direction is given by the board of directors, which may be considered part of the health team. The American Hospital Association (1969) states its major responsibilities and defines the board of directors as "the board that has legal and moral responsibility for the policies and operations of the hospital."

The chief executive officer or hospital administrator is appointed by the board and he/she is responsible to it for implementing the policies relating to the control and effective utilization of the physical and financial resources and for all aspects of providing facilities and personnel for the care and treatment of the hospital's patients.

The importance of the medical staff in a hospital is obvious. While the staff may not have direct authority in the management of the hospital, it does have a very important influence on the hospital's operations, policies, and operational success. A cooperative working relationship is essential between the medical staff and the hospital's financial managers.

Generally, a sound organizational structure is an essential requirement for effective management. But there is no single organization plan that can be regarded as the proper plan for all hospitals because of differences in their size, range of services, type of personnel, management philosophy, and other characteristics (Seawell, 1987).

C. ECONOMIC SIGNIFICANCE OF NONPROFIT ORGANIZATIONS

Nonprofit organizations are among the most influential and powerful institutions in today's society. They range in size from small, local organizations to large national and international ones and are involved in a variety of activities--health and welfare, research, education, religion, entertainment, and recreation. They include foundations, membership organizations, churches, hospitals, museums, colleges, and political organizations. NFPs are all around us. We, as citizens, donate money to them and volunteer our time. The government provides grants, tax advantages, and postal subsidies to them.

Their number says nothing about their size. B.A. Weisbrod, in his book, The Voluntary Nonprofit Sector, presents data to reflect the size of the nonprofit sector. Tax-exempt nonprofits file with the Internal Revenue Service (IRS) each year a statement of their receipts, expenses, assets, and liabilities (Form 990). By using statistical sampling, he was able to project the aggregate revenues of the entire voluntary sector for 1973, with an aggregate total revenue over \$531 billion (Weisbrod, 1977).

More recent data (1985) provide the information that the number of NFPs has increased from 650,000 to 887,000, with an aggregate total revenue over \$796 billion. This represents approximately 20 percent of the revenue of all business firms in the United States (Weisbrod, 1988).

One revenue source that is often overlooked when considering the NFPs is their nonmonetary receipts. For instance, donations of labor services represent an important source of support to the NFP sector. Generally, the volunteer labor is unpriced, so it is not included in Department of Labor statistics on employment and unemployment. Table 3 presents data from donations of labor by type of recipient organization for the years 1981 and 1985.

Table 4 presents data of volunteer labor by sector for the years 1977, 1980, and 1985. This table indicates a substantial increase in total hours volunteered, especially to

TABLE 3

**PERCENT OF PERSONS AGE 14 AND OVER REPORTING
DONATIONS OF LABOR IN THE PAST TWELVE MONTHS, BY
TYPE OF RECIPIENT ORGANIZATION, 1981 AND 1985**

Type of organisation	1981	1985
Religious	19	23
Health	12	9
Educational	12	13
Arts and cultural	3	4
Social services and welfare	5	7
Recreational	7	10
Civic, social, and fraternal	6	8
Political	6	4
Community action	6	4
Justice-related	1	1
Work-related	5	4
General fund raiser	6	11
Informal (no organization involved)	23	19
Other	1	*
Total	112	117
None	48	52
Source: The Gallup Organization, Americans Volunteer 1985.		
Note: Totals come to more than 100 percent because some people volunteer time to more than one type of organization. Since 48 percent of persons in 1981 and 52 percent in 1985 reportedly gave no volunteer labor, the remaining half averaged donations of time to more than two types of organizations.		
*Less than 0.5 percent.		

TABLE 4
VOLUNTEER LABOR BY SECTOR, 1977-1985

Sector	Full-Time Equivalent Volunteers (millions)		
	1977	1980	1985
Private nonprofit	3.6	4.6	5.3
Business	0.1	0.2	0.2
Government	0.8	1.1	1.2
Total (excluding informal volunteering)	4.6	5.9	6.7
<p>Source: Virginia Ann Hodgkinson and Murray S. Weitzman, Dimensions of the Independent Sector: A Statistical Profile, 2nd ed.; and Independent Sector, Americans Volunteer 1985.</p> <p>Note: Full-Time equivalence is calculated on the basis of 1,700 hours per year. Volunteering in other than formal settings is excluded. Data are for persons 14 years old or older.</p>			

nonprofit organizations--48 percent of persons 14 and over volunteering nearly 14 percent more hours, amounting to 6.7 million full time employees, with 80 percent of this labor going to nonprofits (Weisbrod, 1988).

Describing the size of an organization or a sector of the economy by flows of funds or labor force is not the only useful means of assessing its size and importance. (Weisbrod, 1978) Someone might instead consider its assets. Table 5 presents data for assets of nonprofit organizations. These data give one more indication of the size of the NFP sector and they show that its size justifies a great deal more attention than this sector has received (Weisbrod, 1978).

D. SIMILARITIES AND DIFFERENCES BETWEEN VOLUNTARY NONPROFIT AND FOR-PROFIT ORGANIZATIONS

Many nonprofit organizations, such as hospitals, nursing homes, health maintenance organizations, and clinics, closely resemble profit-oriented organizations. Both of them are goal-seeking, hierarchically structured, and need managing. The same decision-making models, leadership styles, and tools and techniques are often used. (Sukel, 1978)

The Management Accounting Practices Committee (1979) of the Institute of Management Accountants states the following compelling similarities associated with accountability and resource allocation issues:

1. Many users having a bona fide interest in nonbusiness organizations are divorced from the day-to-day operations of the organizations. Their position is similar, in this sense, to that of the absentee owners, creditors

TABLE 5
ASSETS OF NONPROFIT ORGANIZATIONS,
SELECTED YEARS, 1953-1975

Total Assets (Billion dollars)				
Year	Current	1972	Percent of GNP	Percent of National Assets
1953	42	72	11.5	1.5
1958	64	101	13.7	1.6
1963	90	135	14.6	1.7
1968	133	164	14.7	1.7
1973	210	181	15.4	1.8
1975	243	176	15.1	1.8
Source: Data in Raymond W. Goldsmith, <i>The National Balance Sheet of the U.S., 1953-1980</i> (Chicago: University of Chicago Press, 1982), Table 62, p. 147.				

and other resource providers in many business enterprises.

2. As a consequence, managers are selected to run the organizations. The selection process varies, of course, but the result is the same. For instance, mayors and senators are elected; hospital administrators are appointed by the board of directors; but, regardless of the method of selection, they and their chosen subordinates manage the resources of their constituents, investors, creditors and donors.
3. The organizations receive financial resources and the managers are obligated and responsible to use those resources in the most effective, efficient way in attaining the goals and objectives of the organization.
4. Those with bona fide interests in the organization have a right to receive periodic reports which will aid them in making rational decisions on issues such as how they will allocate their scarce resources and determining whether those resources they have committed are being well used to reach the objectives and goals of the organizations. (Management Accounting Practices Committee, 1979)

The aforementioned characteristics are essential in determining the basic needs of users to evaluate past resource allocations and to make future allocation decisions.

As mentioned earlier, the most important differences between nonprofit organizations and for-profit counterparts are the purpose of their existence, the tax-exempt status and the source of funds. In oversimplified terms, the ultimate objective of a business firm is to realize net profit for its stockholders through the performance of some service wanted by other people, whereas the ultimate objective of an NFP is to meet some socially desirable need of the community or its members. Thus, NFPs are generally operated to maximize service while maintaining solvency, rather than to generate

profits which can be distributed to shareholders. An NFP is begun by people "investing" funds in exchange for no equity interest (Mautz, 1990).

The investor-owned hospital corporation issues capital stock, seeks a satisfactory return on the stockholder's investment, and distributes profits to the investors. The voluntary NFP hospital, however, does not issue capital stock because, in the absence of profit sharing, there would be no severable value represented by capital stock certificates. This simply means that no part of the profits earned by such hospitals can inure to the benefit of any private individual.

The second major difference is that NFPs are exempt from property and income taxes. The latter exemption is provided in section 501(c)3 of the Internal Revenue Code. To qualify for this exemption, the hospital must be organized as a charitable, NFP corporation whose purpose is caring for the sick. It must operate for the benefit of the indigent to the extent of its financial ability. (Seawell, 1987)

The third difference lies on the source of funds. NFPs can receive tax deductible donations, which are a source of capital not available to for-profit entities. Such donations can replace the need to finance equipment purchases with debt and need not provide a return to the donor. These revenues are often restricted funds and are consequently segregated from operating funds in the financial statements (Chilingerian and Sherman, 1987). For this reason, the American Hospital

Association and other authorities have recommended that NFP hospitals must follow the principles of fund accounting, a practice not normally found in their commercial counterparts. Additionally, NFPs may attract donated services, which may replace the need for expenditures on these services. For-profit organizations generally do not receive such donated services.

In the many sources from the literature, the author found some other areas (besides fund accounting) where the accounting principles followed by NFPs often differ from those followed by business entities. In business entities the records are almost always maintained on an accrual basis, while in NFPs the cash basis accounting is often used. Accrual accounting simply means that revenues are recognized as goods and services are sold and rendered, independent of when cash is received. Expenses are recognized in the period when the related revenue is recognized, also independent of when cash is paid out (Davinson, Stickney and Weil, 1982). On the other hand, most NFPs use cash basis accounting, reflecting only transactions where cash has been exchanged. Some large NFPs, however, do use accrual accounting.

A final difference has to do with the treatment of fixed assets. In business entities, fixed assets are almost always recorded as assets on the balance sheet, and they are depreciated over their expected useful lives. Conversely, in nonprofit accounting, fixed assets may or may not be recorded

and, if recorded, may not be depreciated. (Gross and Jablonsky, 1979).

E. PROBLEMS THREATENING THE EXISTENCE OF THE NONPROFIT SECTOR

The nonprofit sector, like every other sector, is faced with situations and conflicts that threaten its growth and its prosperity. Problems affecting not-for-profit organizations come from both internal and external sources. In both cases, the problems directly affect the NFP sector and press it for modifications of its present mode of operations if the sector is to survive. (Herlzing, 1979)

The internal and largely controllable problems of the NFP sector include poor fiscal management, the lack of systematic and uniform accounting and reporting procedures, and poor information systems (Herzlinger, 1979). These areas will be discussed for the remainder of this section.

1. Poor Fiscal Management

Some NFPs' managers attribute financial difficulties to inflation, unions, and the increased demands for services. But are these the real problems? Dr. Herzlinger disagrees by stating, "Certainly inflation, unions, and increased demands for services have affected the costs of the nonprofit organizations, but the private for-profit sector also has to contend with these factors and seems to be more successful at it." (Herlzing, 1979)

The heart of the problem lies in the neglect of proper procedures for fiscal management, a neglect that is apparent

in the behavior of the nonprofit organization managers and in the absence of systems of sound fiscal management. The indifference of the top managers of most NFPs to matters of fiscal management is pervasive; many of them are professionals, though untrained and unskilled in this area, preferring to delegate it entirely to their technical subordinates, "the accountants", or to dabble in it only to the extent of fund raising. ("If we have a problem, I'll go out and raise funds to meet it"). On the technical level, organized, articulated, and integrated systems for planning, resource allocation, budgeting, and evaluation are usually absent. (Herlzinger, 1979)

This is not to say that the entire NFP sector suffers from this problem; indeed, some of the most innovative techniques in fiscal management have sprung out of this sector--program budgeting, benefit-cost analysis, social accounting, and zero-base budgeting. Rather, the point is that, while isolated NFPs may have done well in some particular aspect of fiscal management, such as zero-base budgeting, few organizations have complete, integrated fiscal management procedures of the kind found in the private sector or the managerial climate that fosters such procedures. This absence is at the heart of the financial pressures of most NFPs (Herzlinger, 1979).

2. Poor Accounting Procedures

Nonprofit organizations have become so pervasive in American society that an understanding of their financial reports is vital not only to their managers and board of directors, but also to private citizens who contribute money and time to them or rely on them for needed services. It is a fact of American life that most of the public is involved in either the functioning or use of services of NFPs. (Tsaklanganos, 1979)

Naturally, there is concern regarding the way nonprofits handle their assets, and, as with all enterprises, the major sources of such information are financial reports. Again as with all enterprises, the purpose of these reports is to communicate the financial position of the organization to the reader (Gross, 1974). Yet, current methods of NFP reporting are diverse and complex, offering an uninviting challenge to the uninitiated lay person and insufficient clarity to the business person and the accountant (Tsaklanganos, 1979).

To indicate how far behind not-for-profit accounting efforts are, as compared with the private for-profit sector, it was as late as 1977 when the Financial Accounting Standards Board (FASB) asked Professor Robert N. Anthony to look into the financial statement objectives and basic accounting concepts of NFPs. Generally accepted accounting principles (GAAP) for private for-profits have been established formally

since 1930, but, because of the impact of the profit motive on these entities, many principles were not readily suitable for the nonprofit sector. (Gross and Jablonski, 1979)

Congress is also aware of the difficulties associated with the accounting methods that are used by the nonprofit sector. In 1973, the Congress established the Commission on Private Philanthropy and Public Needs, entitled the Filer Commission, to study public philanthropy in the U.S. The most important findings were that the accounting methods used by NFPs were not codified, were outdated, and could result in abuses of financial disclosure. In response to these findings, the American Institute of Certified Public Accountants (AICPA) established a group to study the problem and ultimately to codify new rules of accounting and disclosure. The AICPA did make a start with the Hospital Audit Guide (1972) followed by Audit Guides for Colleges and Universities (1973) and Voluntary Health and Welfare Organizations (1974). The American Hospital Association (AHA) and the Healthcare Financial Management Association (HFMA), through its Principles and Practices Board (P&PB), have in most instances supported the applicability of GAAP to hospital financial reporting. (Seawell, 1987)

The absence of accounting rules must be a concern to accountants because, if the accountants' organizations do not quickly develop meaningful accounting principles and reporting practices for the NFP sector, the Congress will do it for

them. "Legislators and regulators are not timid about stepping into the accounting rulemaking arena" (Gross, 1977).

3. Poor Information Systems

Another problem that reflects directly on managers of NFPs is associated with their handling of information and control systems. NFPs have as much need for efficient information and control systems as for-profit organizations do; after all, top management in the NFPs are similarly burdened with acute budgeting problems and policy issues whose resolution depends on the availability and sensible exploitation of accurate, current data (Herlzing, 1977).

The state of control and information systems in most NFPs is dismal. Despite billions of dollars spent to provide relevant, accurate, and timely data, few NFPs possess systems whose quality equals those found in large profit-oriented corporations. NFPs do not lack data; if anything, they enjoy an overabundance of numbers and statistics. Rather, they lack systematically provided information to help management do its job. Without good information, it is obviously difficult for managers to make reasoned and informed decisions, evaluate performance, motivate their employees, and protect the institution against fraud (Herzlinger, 1977).

F. PROBLEMS OF NONPROFIT ORGANIZATIONS

Government encourages and discourages NFPs--subsidizing them and restricting them, proclaiming their virtues and distrusting them. This is not surprising, since there is

little consensus as to what goals society should achieve by fostering NFPs. And without a consensus there can not be tests of whether goals are being reached or even approached (Weisbrod, 1988). In the hospital industry, through the Medicare and Medicaid federal programs, the government has become the largest purchaser of hospital services. Since these two programs' spending play a major role in federal and state budgets, hospital cost increases have become a political issue (Goldsmith, 1981). Moreover, these programs encouraged the growth of for-profit hospitals because they have caused a drop in hospital contributions, since the charitable mission of providing subsidized care to needy members of the community was an important motivator of such contributions. Also, they reduced the amount of unavoidable bad debts faced by hospitals; the hospital industry became more profitable than before and therefore more attractive to private investors.

Studies examining problems affecting NFP hospitals found that these problems deal with low quality of care, inferior operating efficiency because of a lack of business discipline among NFP hospital managers, and slow response to changes in the demand for care (Clarkson, 1972 and Clark, 1980). They suggested that, if NFP hospitals want to overcome these problems, they should adopt some key management techniques, such as competitive bidding, group purchasing, shared services, and demand forecasting.

Other factors that indirectly threaten the existence of the NFP sector deal with complaints from the private for-profit sector concerning tax-advantages, price discrimination mechanisms, postal rate differences, and establishment of relationships with individuals and businesses that are less than arms-length relationships.

In conclusion, the difficulties and challenges facing all NFPs are frequently discussed but apparently not well understood. Opinions and recommendations of possible solutions are as varied as the sources as those recommendations. Unfortunately, many of these recommendations are parochial and do not support the long term wealth of NFPs. The following section addresses specific problem areas and makes recommendations which reflect a synergy of ideas for the improvement and strengthening of the NFP sector.

G. THE FUTURE OF THE NONPROFIT SECTOR

NFPs have reached a point that requires them to reevaluate and reassess their current position and their future. The question becomes one of survivability. Poor management is cited as the primary reason for the failure of most NFPs. In an attempt to improve this situation, benefactors are looking towards correcting perceived deficiencies in management.

Professor R. Anthony answered the question associated with the survivability of NFPs in the affirmative. To justify his answer, he listed the following six hurdles that must be transcended by managers of NFPs:

1. The absence of a profit measure,
2. The absence of competition,
3. Politics,
4. Weak governing boards,
5. Tradition, and
6. Low management salaries.

Anthony believes that the difficulties of defining objectives, of deciding on the resources required to reach objectives, and of measuring efficiency and effectiveness with which the organization performs to meet these objectives embrace the most serious management problems in a nonprofit organization. The profit measure helps for-profit organizations quantify their objectives, measure resource flows, and assess actual performance. Conversely, when an entity does not have the profit measure to focus on, it faces greater uncertainties. But managers in nonprofits can be effective if they would endeavor to improve their control systems and find other operational measures of their objectives and accomplishments. (Anthony, 1971)

The second factor that is needed for the success in the NFP environment is competition. The driving force of the economy is competition. In most nonprofit organizations, the force of competition is muted. Business companies compete for customers; they do everything they can to woo prospective customers. In many NFPs, the new client is not an opportunity, but a problem. In order for an NFP to be well

managed, its leaders must develop ways of interjecting competition into the system. This is possible whenever units of an organization provide a similar service or whenever a unit provides a service that is also provided in the private for-profit sector. (Anthony, 1971)

Anthony also states that managers can be more effective if they are sensitive to the political environment and concurrently able to lessen the political influence on their organizations. This political awareness also impacts on their selection procedures for board members. Board members should be selected not only because they are knowledgeable about the organization's mission, but also because they possess the management skills needed to get the job done. In hospitals, boards frequently are dominated by physicians who are qualified to oversee the quality of care but who may lack the expertise, as well as the time, to check up on the effectiveness and efficiency of hospital management. Board members must become intimately involved in setting policies and providing directions for top managers. (Anthony, 1971)

The tradition that the head of an organization should be a technical specialist disappeared from business companies early in the twentieth century. It persists in NFPs and results in the selection of top men and women who simply are not qualified to manage. Indeed, many of these technical experts do not even enjoy management. They would be happier working at their specialty. (Anthony, 1971)

A second influence of tradition is that NFPs have been slow to adopt modern management techniques. NFPs do differ from profit oriented companies, but they have much in common. They both have objectives; they both make decisions about the use of resources to accomplish these objectives; and, in both cases, an important management function is to see to it that the organization uses these resources effectively and efficiently. Business companies have developed a number of valuable tools for aiding management in this process: budgets, responsibility centers, cost analyses, standard costs, analyses of variances, management by objectives, linear programming, and probability analysis. The list could be extended indefinitely. Most of these can be used, or adapted for use, in NFPs; but NFPs are slow to do so. (Anthony, 1971)

The final point Anthony makes concerns pay. He believes that, in order for the nonprofit sector to attract better managers, they need to make the profession of management in NFPs more attractive to young people who are choosing a career. The principal way of doing this is to increase management salaries. Specifically, the top management salaries should be increased in order to attract young and aggressive managers. (Anthony, 1971)

Another prominent business leader, Peter Drucker, came up with almost the same approach. He believes that nonprofits need more than "great men." "They need managers who can discipline themselves to be systematic in their approach to

managing. This type of manager has the ability to detach oneself from the day-to-day problems." (Drucker, 1971)

As the reader can notice, Anthony and Drucker seem to agree that, in order for NFPs to operate successfully, they will have to adopt innovative techniques that are already being adopted by for-profit entities. The point is that basic management concepts can be applied to NFPs as well as to profit oriented counterparts. Many proponents of this theme are encouraging NFPs' managers to "develop expertise or hire people with knowledge of goal-oriented budgetary processes and/or to develop skills and expertise in applying management by objectives techniques" (Mc Conkey, 1975). Others feel that NFPs' managers "should adopt a broader policy of using consulting services and attempt to join together in a system that would allow them to share services" (Mittenthal and Mahoney, 1977). Still others believe that "the salvation of the manager may be the use of marketing techniques and strategies, or consumer affairs feedback systems" (Kotler, 1979).

The preceding suggestions and recommendations all require that adequate information be available to managers to improve decision making. According to Dilley (1975), "The managers of NFPs need to understand where their organization is now before they can guide it to where it should be in the future." One useful method of assessing an organization's health is an expanded audit or internal auditing system. "The purpose of

an expanded audit is to provide top management with a snapshot view of the total organization and how each part functions in respect to the other parts" (Dilley, 1975).

The next chapter will examine the purpose and usefulness of expanded audits in NFPs.

III. OPERATIONAL AUDITING

The purpose of this chapter is to define operational auditing by exploring its nature, to examine its potential benefits as well as its limitations, to discuss the qualifications that the auditor should have to successfully carry out the audit, and to assess the applicability of this technique to the NFP sector.

A. DEFINITION

A reader can find the concept, operational auditing, in the literature under a number of titles: operations audit, social audit, management auditing, performance auditing, systems auditing, efficiency auditing, and a few others.

For the purpose of this thesis, an operational audit will be defined as a subset of an expanded scope/comprehensive audit. The easiest way to describe the nature of an operational audit is to first define the broader scoped comprehensive audit and, secondly, describe its components. An appropriate definition of such an audit might be as follows: (Knighton, 1976)

Systematic examination of records and other sources of information, conducted by a competent and independent authority for the purpose of obtaining evidence to support an evaluation and judgement concerning, (1) the adequacy and reliability of the information and control systems, (2) the effectiveness of programs to accomplish their intended objectives, (3) the faithfulness of administrators and operating personnel in adhering to prescribed rules and policies and complying with legislative and

executive intent, and/or (4) the fairness of financial statements and performance reports issued by managers with the intent of disclosing present conditions and/or the results of past operations and programs of an organization. (Knighton, 1976)

The above definition sets forth a broad range of audit activity by spelling out the many objectives for which audits are conducted. An audit may be undertaken for any one or a combination of these purposes. A comprehensive audit would include them all. (Knighton, 1976)

If this comprehensive definition of auditing is broken down into its component parts, each corresponding to one of the four basic areas of managerial responsibility and accountability, the following four types of audits can be said to make up a comprehensive audit: (Knighton, 1976)

1. Financial Audit: A financial audit is basically an examination of financial records and controls, for the purpose of determining that funds are legally and honestly spent, that receipts are properly recorded and controlled and that financial reports and statements are complete and reliable. This is by far the most pervasive type of auditing conducted in governments today.
2. Compliance Audit: A compliance audit is an examination to determine whether or not managers have adhered faithfully to legislative, legal, and administrative requirements and policies. Some compliance auditing can be done as an extension of financial auditing, while other aspects of compliance auditing must evaluate compliance with non-financial requirements, policies and legislative intent.
3. Operational Audit: An operational audit includes an examination to obtain evidence with which to evaluate the efficiency of operations and the effectiveness of operating policies, procedures, practices and controls to promote efficiency in operations. It includes an evaluation of the utilization and control of non-financial resources, such as property, equipment, personnel, supplies, etc.

4. Program Audit: A program audit is an examination to obtain information with which to judge the effectiveness and accomplishments of public progress. It focuses heavily on the management control system and the reliability of information contained in performance reports that purport to disclose the results of operations in terms of program outputs or accomplishments. (Knighton, 1976)

As might be expected, the above definition is only one of a variety of definitions offered to explain the purposes and objectives of operational auditing. Other published definitions of operational auditing that might help to explain the concept include the following:

Operations auditing is a technique for regularly and systematically appraising unit or function effectiveness against corporate and industry standards by utilizing personnel who are not specialists in the area of study with the objectives of assuring a given management that its aims are being carried out and/or identifying conditions capable of being improved. (Lindberg and Cohn, 1972)

An operational audit is a review of any part of an organization's operating procedures and methods for the purpose of evaluating efficiency and effectiveness. At the completion of the audit, recommendations to management for improving operations are normally expected. (Arens and Loebbecke, 1991)

The operational auditing concept is not new; it has been around since at least 1875. In that year, the Krupp company in Germany apparently carried on some form of operational auditing, if the company audit manual is any indication:

The auditors are to determine whether laws, contracts, policies and procedures had been properly observed and whether all business transactions were conducted in accordance with established policies and with success. In this connection, the auditors are to make suggestions for the improvement of existing facilities and procedures, criticisms of contracts with suggestions for improvements, etc. (Eds, 1980)

Perhaps one writer summarized the history of operational auditing best with the following statement: "It seems likely that the operational audit is even older than double-entry bookkeeping, in as much as it is purely the product of applied common sense." (Flesher and Siewert, 1982)

It has only been since World War II that operational auditing has gained stature as a valuable tool of management. As a matter-of-fact, it was a public NFP organization that is given credit for the formal introduction of operational auditing in the late 1960s. That organization was the General Accounting Office (GAO). Not until 1972, when the GAO published its Standards for Audit of Governmental Organizations, Programs, Activities and Functions (the "yellow book"), did the accounting profession begin to develop one of its most productive and beneficial tools. (Flesher and Siewert, 1982)

The GAO's "yellow book" described auditing for economy, efficiency, and effectiveness as follows:

Economy and efficiency audits include determining (1) whether the entity is acquiring, protecting, and using its resources (such as personnel, property, and space) economically and efficiently, (2) the causes of inefficiencies or uneconomical practices, and (3) whether the entity has complied with laws and regulations concerning matters of economy and efficiency.

Economy and efficiency audits may consider whether the entity:

1. Is following sound procurement practices.
2. Is acquiring the appropriate type, quality, and amount of resources when needed at the lowest cost.
3. Is properly protecting and maintaining its resources.

4. Is avoiding duplication of effort by employees and work that serves little or no purpose.
5. Is avoiding idleness and overstaffing.
6. Is using efficient operating procedures.
7. Is using the minimum amount of resources (staff, equipment, and facilities) in producing or delivering the appropriate quantity and quality of goods or services in a timely manner.
8. Is complying with requirements of laws and regulations that could significantly affect the acquisition, protection, and use of the entity's resources.
9. Has an adequate system for measuring and reporting performance on economy and efficiency.

Generally, at the completion of the audit, the auditor does not express an opinion on the overall level of performance. Rather, the auditor would report findings and conclusions on the extent and adequacy of performance, and on specific processes, methods, and internal controls that can be made more efficient or effective. If potential for improvement is found, the auditor would recommend appropriate corrective actions. (GAO, 1988)

B. NATURE OF OPERATIONAL AUDIT

Senior executive support for operational audits was evidenced in comments made to audit staffs by executives of two large companies. The first said, "I want you to assume that you are the owner of this business, that the business and all of its profits belong to you. Before you recommend a change, before you criticize an operation, ask yourself whether you would do this if the business was yours." The second said, "I want you auditors to regard your job as that of doing the things for management that the managers would be doing for themselves if they had time to do them."

Both of them reached to the same conclusion, "which is that the auditor should be thinking as management thinks." Management has only a secondary interest in protective control. Management's principal interest focuses on activities; the auditor's observation of these activities and the related controls is of paramount importance of operational auditing. (Cadmus, 1964)

To be effective, "operational auditing should be considered as an attitude, a manner of approach, analysis and thought, not as a distinct and separate type of auditing which is characterized by special programs and techniques." A common misunderstanding on the part of some internal auditors is that there is a clear-cut distinction between traditional financial auditing and operational auditing. In performing operational audits, auditors may be tempted to look for special manuals which will tell them how to perform them, when all that is really essential is a change in their own manner of approach and analysis. Parochial internal auditing will be greatly directed to protective analysis and appraisal, "often in relation to some set of dogmatic standards of financial control." The familiarization with actual operations and operating problems is the starting point of operational audits, followed by analysis and appraisal of the controls to assure that they are sufficient to protect the business. This, however, is only the beginning of the audit. "The examination of the controls becomes a starting point for

appraisal of the value of the controls in the operation of the business." (Cadmus, 1964)

The most distinguishing difference between the operational audit and the traditional financial audit is the scope of the engagement. The first one includes a review of the objectives of the organization, the environment within which it operates, its operating policies, personnel, and even its physical facilities. The operational auditor will use a greater variety of audit tools to obtain evidence necessary to fulfill the objectives of the audit. The financial audit is concerned primarily with the fiscal records. Its objectives are to confirm a state of financial affairs, to verify that generally accepted accounting principles have been applied with consistency, and to express an opinion on fiscal stewardship. (Norbeck, 1969)

In both audit types, the auditor measures against standards in carrying out the audit. The standards that are used in an operations audit come from two main sources. These two sources are the individual entity and the industry of which the entity is a part. Company standards that are used by operations auditors include lists of objectives, goals, plans, budgets, records of past performance, policies, procedures, and directives. Industry standards include industry averages and common business sense. True, these are not always objective standards, but they are standards nonetheless. Because the standards do lack objectivity, the

auditor would not accept an engagement to render an opinion to third parties, but subjective judgments can be used to identify possible problem areas. (Flesher, 1977) Table 6 provides a comparative summary of these two audit types.

C. BENEFITS OF AN OPERATIONAL AUDIT

An operational audit has many benefits to offer. For example, departments and agencies which have a strong operational auditing group are finding that the principal benefit is that it provides departmental management with an independent answer to the question: "How well are we meeting our responsibilities?" The operational audit provides an assessment of whether the board of directors and those who are accountable to them have fulfilled their duties, achieved their objectives, adhered to the terms of reference, and observed the limitations and restrictions imposed on them.

A further important benefit resulting from a strong operational audit program is that it will also provide an independent answer to the question: "Are there any major problems that are not being adequately dealt with?" The principal reason for undertaking this type of audit is the need for detecting and overcoming current managerial deficiencies and resulting operational problems in ongoing operations.

TABLE 6**COMPARISON BETWEEN FINANCIAL AND OPERATIONS AUDITING**

Characteristic	Financial Auditing	Operations Auditing
1. Purpose	To express an opinion on financial statements and to assess financial stewardship	To appraise and improve functional management activity
2. Scope	The fiscal record	An operational or function
3. Orientation	To the financial state of affairs from a retrospective viewpoint	To the operational state of affairs, past, present, and future
4. Yardstick	Generally accepted accounting principles	Operations management principles
5. Method	Generally accepted auditing standards	Operations management techniques
6. Precision	Ostensibly absolute	Relative
7. Recipients	Primarily external-shareholders, government, public	Internal-management
8. Realization	Actual	Potential
9. Necessity	Legally required	Optional-management prerogative
10. History	Long-lived	Recent, related to systems approach
11. Catalyst	Tradition	Executive request
12. Frequency	Regular-at least annually	Periodic, but with indefinite timing in most instances
Source: Norbeck, E.F., Operational Auditing for Management Control, 1969, p. 29.		

Other benefits to management include the reassurance resulting from the knowledge that all aspects of their responsibilities are receiving periodic independent examination and the satisfaction gained from improvements to performance resulting from action taken on issues identified by the auditor. (Blair, 1974)

Additionally, some companies make planned use of operations audits for personnel development. They have a permanent operations audit manager and a nucleus of key personnel. The rest of the staff consists of people who are likely candidates for future reassignment. Staff members assigned to operations audit groups primarily to give them the exposure resulting from working in many phases of the company are moved to positions elsewhere in the company as the need arises. (Lindberg and Cohn, 1972)

Operations auditing offers potential managers the opportunities to obtain a "bird's-eye" view of the organization and the administrative process that are especially beneficial to operating personnel. Individuals with mostly hands-on experience with new problems and situations are forced by some exposure to operations auditing to make fuller use of their judgement and imagination, and so the company's manpower resource is enriched. (Lindberg and Cohn, 1972)

D. LIMITATIONS OF OPERATIONAL AUDITING

Like any management tool, operational audits must be understood and used properly for satisfactory results.

Furthermore, they need the full backing of top management. Three of their principal constraints include time, knowledge and cost.

Time is a limitation because managers must be advised about the state of affairs in their areas of responsibility promptly enough that they can act effectively. Therefore, audits must be performed regularly and often enough so the problems can be caught before they become big or entrenched. On the other hand, audit engagements must not disrupt either productivity or morale. If they are to be performed with regularity, timeliness, and convenience, operations audits cannot be lengthy, drawn-out affairs. (Lindberg and Cohn, 1972)

Knowledge is a constraint because no one is an expert in all business fields, nor can a company afford to have on its staff a specialist on every aspect of the business that is to be audited. Necessarily, then, operational audits must be performed by individuals who are trained more fully in auditing than in what is being audited. Among other things, that means that operations audits cannot be used as a vacuum cleaner to clean up every problem; realistically, it can be used only to search for major deficiencies and opportunities for improvement. The operations auditor will not turn away from the small problems and opportunities, but discovering them will be a by-product. In any event, the auditor will

detail and seek to prove only the deficiencies and opportunities for improvement that are significant in terms of dollars or effectiveness. (Lindberg and Cohn, 1972)

Together, time and knowledge as constraints produce the third limitation of cost. The statement lacks precision, but it must be said that an essential characteristic of operations audit is that it is a low-cost appraisal tool even though no dollar standards are available. When the cost of a single operations audit rises above, say \$5,000 or \$6,000, it is likely that a good deal more than the discovery and delineation of problems or opportunities for improvement has been undertaken. As a result, auditors are often thrust into the manager's or specialist's province and, despite the greatest precautions, hostility is often stimulated. (Lindberg and Cohn, 1972)

Going beyond the above factors, the most important problem of operations auditing is that it might negatively affect a manager's morale, which could adversely affect the productivity of his area of responsibility and accountability. Utmost tact and diplomacy are required on the part of the auditor, or the operations audit will cause dysfunctional effects on those reviewed. (Thierauf, 1980)

Overall, an audit which examines the effectiveness and efficiency of operations is entering a sensitive area and must be handled with a keen awareness of the human relations aspects by both the auditor and senior management. Thus, "the

people problem" emerges as the most critical factor in undertaking an operations audit.

B. AUDITOR'S QUALIFICATIONS

Before discussing what are the qualifications that the operational auditor should have to successfully carry out the audit, the author considers it appropriate to offer a brief discussion about who should conduct or perform this type of audit. When talking about this, two questions come to mind. First is whether these audits should be performed by someone inside the organization or by someone external. Second, should they be performed by accountants or by some other professional group?

The answer to the first question depends heavily on the size of the organization needing the audit and the amount of resources that they are willing to spend to support this effort. Many firms could not afford to hire a full-time operational auditor. Of course, this solves the problem of the small and medium size organizations. Concerning large firms, some authorities apparently believe that there is an advantage in hiring outside auditors to perform operations audits. Whatever the reason, an outsider often seems to be able to accomplish something when an equally talented employee of the firm gets nowhere. This may be so because a directly measurable outside cost has been incurred.

The second question has to do with whether such audits should fall within the field of the accountant. Historically,

operational audits have been performed by internal auditors. Since internal auditors normally have an accounting background, the performance of this type of audits has become associated with the accounting profession. Moreover, the term "audit" has an accounting connotation to it. (Flesher and Siewert, 1982) The performance of operations audits, however, does not necessarily require an accounting background. Some management consulting firms also undertake such engagements; however, most do not since they feel that their real strength and highest billings are in problem solving, not problem locating. (Lindberg and Cohn, 1972)

There is no consensus among CPA firms as to which staff performs operational audits. Some firms use only auditing personnel, some use only management services staff members, and some other firms use a group made of both types of employees. (Lindberg and Cohn, 1972)

Accountants, both internal and external, and management consultants do perform operational audits. The question of who performs this type of audits is not of singular importance; of greater importance is the increased efficiency that results from an operational audit.

The operational auditors must possess certain technical qualifications that will lead them systematically through the audit process. "They must exhibit and strive to meet certain personal qualifications that will facilitate their interacting with the members of the firm being audited." (Brink, 1973)

1. Technical Qualifications

According to Brink (1973), one of the technical qualifications of the auditor is that he must be credible. Without credibility both up and down the chain of command, the audit can not be successful, nor will recommendations have a high probability of being implemented. Accompanying credibility is objectivity. Objectivity is the whole idea behind any audit. As such it is paramount that the proposed auditor meet this requirement first. (Brink, 1973)

Technically, the operations auditor must be able and prepared to deal with a wide range of operational situations. For this reason, the auditor will need to have those technical qualifications which are of the broadest possible application. First on the list, therefore, might well be previous involvement in operational activities or at least exposure to them. The activities most useful would vary with the individual organization, but they will preferably have been in situations where a number of people were involved and where there were problems of administrative direction and control. (Brink, 1973) Secondly, a generally useful qualification would be some experience in or undertaking of the accounting and financial control processes. This type of qualification does not necessarily involve direct work of an accounting nature but it does at least involve the kind of exposure which provides a reasonable understanding of this area. This is consistent with the view that the financial control dimension

can be an effective starting point for the examination of the broader types of operational control. (Brink, 1973)

2. Personal Qualifications

Personal qualifications also play a major role during the audit if the auditor is to be effective. Here one is confronted with a list of personal qualifications which are normally deemed to be desirable. An evaluation of these individual qualifications is at best very subjective. One useful approach is to look at these personal qualifications in terms of the major end objectives. Under this approach, one can identify three such objectives:

1. To achieve a good first impression.
2. To develop a more enduring relationship over longer periods of time, and
3. To provide an additional basis for sound professional results. (Brink, 1973)

The above three end objectives are related, and they do emphasize particular types of personal qualifications. Some examples of personal qualifications associated with the aforementioned three objectives include the following:

a. To Achieve a Good First Impression

Because first impressions can be both good and bad, a question that arises is, "What can be done to contribute to a successful first impression?" According to Brink "a combination of personal appearance and the ability to capitalize quickly on limited opportunities" should be the answer. With respect to the first, "standards of dress and

grooming should be in the middle range between extreme conservatism and high style." With respect to the latter, "one should be able to respond effectively to questions, and be able to behave with courtesy and professional competence" (Brink, 1973)

b. Building Longer-Run Relationships

Here, the question that arises has to do with "what personal qualifications most contribute to achieving a relationship that the auditor will earn respect and cooperation?" Brink answered this question by offering a list of personal qualifications. They include basic fairness and integrity, reasonable humility, and professional poise. (Brink, 1973)

c. Building a Basis for Professional Results

In this last category are personal qualifications that "bear more directly on his competence in a strictly professional sense, and relate particularly to the way the auditor goes about his actual auditing activities." Again, Brink offers another list of qualifications. Of these, the most important are curiosity, a critical attitude, persistence, self-confidence, cooperation, and the ability to make sound judgments. (Brink, 1973)

Overall, since operational auditing is concerned with business analysis and judgement, the success of the audits in helping the organization to operate better will be largely dependent on the attitudes and talents of the auditor.

F. STEPS IN AN OPERATIONAL AUDIT

According to Crockett (1980), there are five phases that a typical operations audit is composed of. They are:

1. **Familiarization.** During the preliminary preparation or familiarization phase, which is usually accomplished in their own offices, the auditors obtain and review background information on the unit, activity, or function that they are to audit. Examples of such information are objectives of the auditee, resources used (financial, material, and human), organizational structure, controls employed, and position and interfaces in the overall organization. This phase includes auditors' reviews of quantified data in order to identify trends and possible problem areas.
2. **Survey.** This phase is extremely important because it determines the entire thrust of the operational audit. During this phase, auditors use what they learn in the familiarization phase as a guide in asking questions of operating management, in reviewing reports and output of other control mechanisms, and in observing operations. The survey should enable auditors to identify problem areas, sensitive areas, and operations that are crucial to the success of the auditee. These should emerge as auditors review the output of control systems, discuss operations with line management, and observe operations with an experienced eye. There are numerous operational auditing questionnaires available to guide auditors in this phase. When the survey is completed, auditors should have pinpointed specific aspects of the auditee's operation for in-depth audit analysis.
3. **Program Development.** In the program-development phase, auditors tailor audit programs to guide them in analyzing the specific aspects identified by the survey. Again, there are operational audit programs available that auditors can adapt to their specific needs. However, because of the unavailability of a suitable program, auditors may develop their own audit programs based upon their audit objectives and the nature of the activity being reviewed.
4. **Audit Application.** The audit-application phase is the fieldwork of the audit during which auditors apply audit techniques to gather evidence, make analyses, draw conclusions, and develop recommendations. This phase utilizes the audit program for an in-depth review of the auditee's operations identified by the survey.

Normally, the application phase is the most time-consuming phase of the audit. During the fieldwork, auditors must identify specific problems, gather evidence bearing on problems, analyze all relevant data, and develop recommendations for solving the problems.

5. **Reporting.** This is the most critical phase of an operational audit. The entire audit effort will fail unless the auditors are able to convince management to act upon their recommendations. This requires a quality audit report with facts stated precisely and clearly, conclusions concerning operating problems presented logically from the facts, and practical recommendations that address the problems described. Good reporting requires checking facts, closely scrutinizing conclusions and recommendations, using nontechnical language whenever possible, and extensive editing. Well-written reports should serve as a basis for management action to increase the effectiveness, efficiency, and economy of the auditee's activities. (Crockett, 1980)

The next chapter will provide an in-depth analysis of the audit process.

G. APPLICATION OF OPERATIONAL AUDITING TO THE NFP SECTOR

The author reached a conclusion that operational audits are as applicable to the NFP sector as they are to the other two sectors of the U.S. economy. But, "not everyone supports the concept of operational auditing." (Santocki, 1974) The point is that operational auditing is a useful management tool that clearly fills a need. It came into being because traditional sources of information do not fully meet the requirements of managers in many current forms of organizations.

Central to the whole concept of operational auditing is the idea that managers of both for-profit and nonprofit

organizations need some kind of system for detecting potentially destructive problems and opportunities for improvement. That is, "modern business should develop ways to anticipate and cope with the heightened risks and more sophisticated resources involved in reaching its objectives." (Lindberg and Cohn, 1972)

One of these ways is through operational auditing. By employing this, management can maintain the effectiveness and efficiency of their operations, even though organizational complexity, financial commitments, and communication network sizes have been increased.

The next chapter will focus on developing an operational model that may be proved beneficial in auditing a NFP organization.

IV. OPERATIONAL AUDIT MODEL

In the previous chapter, great emphasis was given to describing the nature of operational auditing by examining its potential benefits as well as its limitations, reviewing auditors' qualifications, and finally assessing the applicability of this technique to the NFP sector.

An operational audit is a large undertaking, no matter who performs the audit. Most organizations are integrated structures consisting of hundreds of functions performed by hundreds of employees. Because of the diversity of operations, the operational auditor needs a framework in which to work. That framework, combined with a detailed audit program, provides the necessary groundwork for the operational audit.

So, what is needed is to construct a model that can provide a framework for both large and small NFP organizations. There is a need to build a model that is affordable in its cost and in the time that has to be devoted to complete the audit. There is a need for a model that is both integrative and flexible, which will provide the NFP manager the opportunity to select those components of the audit most practicable for the organization. The manager should be able to apply one phase now and another later, to apply the entire model, or just to deal with the biggest problems. There is no specific amount of time that should be suggested for an

auditor to work through the complete model. The time frame of the audit is directly related to the amount of resources available for it and to the size of the organization.

All limitations of an operational auditing discussed in Chapter III affect the model. An assumption is made that the auditee is able to implement recommendations deriving from the audit. In the case of small NFP organizations, there may be some difficulties in implementing the audit results, although management wholly understands and agrees with them. One possible reason is that implementation will require resources that may not be available.

With these objectives and conditions in mind, the author developed an operational audit model that is intended to cover the needs of NFPs. In designing his model the author had not any particular type of NFP organization in mind. The model that will be described in the following sections is composed of four stages: the familiarization stage in which the auditor obtains a general notion about the NFP to be audited; the diagnostic audit stage in which auditor's efforts focus on collecting data, analyzing, and interpreting them; the critical evaluation and application stage in which the auditor focuses on areas needing further attention and utilizes an audit program to further penetrate into the problem areas; and lastly, the reporting stage which represents the audit product by indicating the conclusions and recommendations.

A. FAMILIARIZATION STAGE

The first and maybe the most basic activity of the operational auditor is to inform himself about the operational activity that is to be reviewed. This phase of the audit process is commonly known as familiarization. For the purpose of this thesis, this stage will be divided into two broad parts. The first part includes everything that is done before arriving at the field location. The latter part includes what is done at the field location.

First of all, the auditor should have a pre-audit meeting with the Chief Executive Officer (CEO) or the Administrator. The purpose of this meeting is to first define the roles of the auditor and the NFP's personnel involved in the audit and the procedures to be followed. This meeting will typically be shorter and simpler if the audit will be conducted by an internal auditor rather than by an independent or external auditor. If an independent auditor is involved, the formal terms and conditions of the contract between the two parties should be reviewed and any questionable areas should be resolved. Once the operating ground rules have been established, the auditor, by asking open-ended questions to the CEO/Administrator, will try to evaluate the organization's readiness for the audit and its ability to accept changes.

At this point, it is important to mention the significance of the first impressions that were discussed in the last chapter. Certain thought and attention should be given to the

matters associated with auditors' qualifications. During this meeting the auditor should introduce himself by offering information about his background and experience.

After sufficient time has been given to discussions with the CEO/Administrator, the auditor should have a meeting with the department heads of the organization. Ideally, they will welcome the auditor, they will appreciate the purpose of the operational audit function, and they will look upon the audit as a useful learning experience. (Cadmus, 1964) The auditor should use these meetings as a means of opening up communications. These meetings may also help the auditor to concentrate on those areas which can benefit most from an objective appraisal. Many times the department heads are aware of problem areas which have not been corrected because of lack of support from internal management. (Gruber, 1983) Thus, communications can facilitate actions to correct problems which are recorded during the audit. During these meetings the auditor will also get first hand the department heads' descriptions of the operational activities, organizational relationships, and other points of interest.

In the second part of the familiarization stage, the auditor is to become familiar with the NFP being audited. First, the auditor should examine the individual organization's goals, objectives, and budgets. He/she may also conduct research of current business literature in order to construct a knowledge foundation to permit a comparative

analysis of the audited organization to others. Industry averages and ratio analysis may provide standards against which the auditor can measure the organization being audited.

Another way that an auditor familiarizes himself/herself is by taking a physical tour of the facilities of the organization. Direct observation provides an excellent source of information about the organization. A physical walk-through of all departments provides the auditor with the opportunity to view the entire operation and obtain an overall impression of the organization. Discussions with the employees may offer hints of problem areas that may be pursued later. Moreover, during a physical walk-through of an operation, the auditor might observe idle equipment. This may mean that the organization is not utilizing the equipment fully. Overall, the tour can make the best use of the auditor's creativeness. (Flesher, 1982)

When the auditor obtains a sufficient working knowledge of the actual operations, he/she is ready to examine the environment within which management operates, and the existing controls which are dictated by it.

According to Cadmus (1964), first comes the organization structure. This is important because "it provides the auditor with the learning of the assignments of authority and responsibilities, the relationships among the departments and between subordinate groups within the department". (Cadmus, 1964) The auditor will want to determine whether the written

organization chart corresponds to the de facto organization. For this reason, a clear organization chart should be available. In the absence of the organization chart, the auditor should prepare one to use as a guide during the audit. (Cadmus, 1964)

Next is the review of the policies and procedures which govern the work of the organization. Written policies and procedures are a necessity in practically all operations. Discussions with personnel at all levels will necessarily be supplemented by a review of written policies and procedures of all kinds which reflect on the administration and control of the various types of operational activities carried on by the organization. Procedures and policies "establish the standards for performance of work". Policies and procedures manuals can help to ensure adherence to stated goals and objectives. The auditor will want to ascertain whether written policies and procedures are being properly carried out. If not, the organization is either acting incorrectly or the manual should be changed to reflect a new procedure. Written policies and procedures help ensure that there is unity, continuity, and consistency within the organization. If there are no written procedures and policies, the auditor should learn from the managers and supervisors the standards that govern the activities which are being audited. (Flesher, 1982)

The process of familiarization is one that will continue throughout the audit. The objective of all the familiarization activity is that the auditor know what the operational activity involves and how it is supposed to be managed. Without a sufficient working knowledge of the objectives, procedures, and controls of the organization, the auditor can not achieve a fruitful audit.

B. DIAGNOSTIC AUDIT STAGE

After completing the familiarization stage, the audit will smoothly enter into the second stage, which is the diagnostic audit stage. Here, an audit survey is an important and effective method to be used to plan the field work. It is an effective method to help identify specific audit areas and to obtain information for use and planning. "It is a process for quickly gathering information, without detailed verification, on the organization's programs, activities and functions" (GAO, 1988). The "yellow book" describes the significance of the survey method as follows:

A survey will provide information about the key systems and procedures used for managing finances and operations and for evaluating and reporting performance. It will also provide information about the size and scope of the entity's activities as well as areas in which there may be internal control weaknesses, uneconomical or inefficient operations, lack of effective goal achievement, or lack of compliance with laws and regulations. However, tests to determine the significance of such matters are generally conducted in the detailed audit work as specified in the audit programs. (GAO, 1988)

1. Survey Techniques Used in the Model

There is a number of approaches that may be used throughout the survey to obtain information and identify areas warranting further attention. (Scantlebury and Raaum, 1978) This model employs the following methods:

a. Review of Management Reports

The auditor's review of the reports that management regularly uses to obtain information on progress, status, or accomplishments of work can be a valuable source of information. Such reports include budgets, operating statements, department cost reports, etc. These reports can provide insights into how well goals are being achieved. The auditor needs to analyze reports that make comparisons, highlight variances, and show among other things (Raaum, 1979):

- How work is progressing in relation to time and cost objectives.
- Whether desired program objectives are being achieved.
- Whether operations are becoming more efficient.

Needless to mention, reports should be prompt, fair, concise, and complete. If managers do not receive such information, the auditor should ask how they control their operations.

b. Review of Internal Audit Reports

Internal audit reports can also be a valuable source of information. Of particular interest to the auditor are those reports which highlight findings on which management

has not acted. The auditor should ask the reasons for inaction in such cases, since these circumstances could throw light on weaknesses in the management system that have not previously been referred to top management for resolution. Also, prior work by internal auditors may help to reduce survey work and save valuable time.

c. Questionnaire

Questionnaires are the tools with which the survey will be most efficiently pursued. Their principal value lies in the information they produce. Raising a good question is usually the key to uncovering a hidden problem or revealing a sound solution. (Thierauf, 1980) The operational audit questionnaire simply asks questions. If all questions are answered "yes", operations are proceeding as desired. If there are many "no" answers, difficulties are being experienced and must be explained in writing. If the question does not apply, the N/A column is checked.

The questionnaire that this model employs was not designed with any particular organization in mind. This unbounded format provides flexibility, so that it may be adapted to any organization. Developed by the author, based on experience and a thorough literature review, its focus is on management of an NFP organization. However, the questionnaire need not be limited to an analysis of management. Professional and technical aspects could be included. For

example, medical issues could be added in the case of a non-profit medical facility. The questionnaire's inherent flexibility encourages tailoring and improvement, so that it fits the audit needs of the organization.

The particular questionnaire used in this study focuses on the following nine areas of analysis: (1) facilities, (2) procedures, (3) planning and budgeting, (4) communication, (5) personnel, (6) purchasing, (7) inventory control and management, (8) cost and pricing, and (9) risk and insurance. The above nine areas were selected because they put emphasis on the business-like operations and practices that are likely to be encountered in any and all NFPs. The choice of specific questions was arbitrary and there is a small amount of overlap between the areas. The complete questionnaire is provided in Appendix A. The author considers it appropriate to offer a brief discussion of what the auditor should seek when examining each area:

(1) **Facilities.** Facilities provide a range of services that deal with the housing of operations, and the direct production of goods and services. The facilities category of the questionnaire asks whether adequate space and equipment are available and whether all available equipment is being utilized. Also, the questionnaire asks about the authorization and proper use of the organization's assets, and whether they are utilized in a manner that results in maximum efficiency for the organization.

(2) **Procedures.** This area of analysis includes the determination of compliance with existing procedures and policies, the appraisal of the efficiency with which they are being implemented, and, finally, the questions of whether they can be improved. The auditor should be able to make his most immediate contribution in some of the more procedural and day-to-day operational areas. Also, he/she needs to be alert as to where contributions can be made in the more significant policy and decision making areas.

(3) **Planning and Budgeting.** Long-range planning is required as a logical framework within which consistent and meaningful short-range goals may be established. A well conceived budgetary program, properly integrated with the accounting system, is one of the most important tools available to managers. Since the budget is really a control tool as well as a planning tool, additional effort is needed to utilize the control tool after the planning tool has been developed. The objectives of the auditor in reviewing this area should be to interrelate plans with budgets to determine that essential, accurate, and timely information is available about the resources required to implement the objectives of the organization as a whole, and that information is accurate and is being used properly to ensure that resources are available when needed.

(4) **Communication.** The significance of a communication system is obvious. Formal meetings, minutes,

manuals, instructions, and formal reports are the bases for an effective formal communication system. It allows the managers to communicate with others, inform them, acquire information from them, and plan, control and carry out their responsibilities. The communication process is the foundation upon which the management functions depend. Here, the auditor should ensure that managers have proper access to factual data, that it is correct and complete, and that it is readily available in the right quantity and quality.

(5) **Personnel.** When approaching this function, the auditor should identify who in the organization is responsible for personnel management. Someone should be responsible for handling the continuing tasks of hiring, ensuring the adequacy of staff, keeping their records, training and evaluating them, hearing their grievances and handling their problems, promoting them, and terminating them. (Lindberg and Cohn, 1972) The whole area is sensitive and the auditor should proceed with care.

(6) **Purchasing.** The basic objective of the purchasing function is to obtain the proper materials and supplies at the right price, the right quantity, and the right time. It is a major business function which involves the coordination of the needs of many diverse departments with the offerings of many sellers. The auditor should examine the documents that lead to buying actions and assess how efficiently the organization obtains the required materials.

(7) **Inventory Control and Management.** Because of the significance of inventory control and materials management to most organizations, the auditor here is looking for the organization's success or failure in meeting pre-specified objectives. Particularly, his/her concern is that an existing system is being administered efficiently in a physical and procedural sense. This simply means that the auditor's concerns are about establishing accountabilities for materials; sufficient information about them; promptness of the various operational actions, such as receiving of materials into stores, release of materials from stores, efficient handling of deviations from established procedures, etc.; effective utilization of people involved with inventories; and economy of operational costs.

(8) **Cost and Pricing.** Understanding cost and the factors that affect it is essential to the effective management of any organization. As important as cost is to the overall survival of an organization, it is still true that many managers operate with only the slightest knowledge of their costs. These managers set their prices based on subjective appraisals rather than factual cost information. Pricing can be effective only when cost information is sound. (Lindberg and Cohn, 1972)

In exploring this section, the auditor should first study the cost accounting system and how the

actual and estimated cost data have been collected, classified, and reviewed, and how management utilizes them for making decisions and performance evaluations. The second area that the auditor should focus on is the pricing strategy used by the NFP being audited. The auditor should ensure that the auditee understands the significance of a sound pricing system, which is based on the ability to respond quickly, efficiently, and sensitively to changes in costs and in economic conditions in the marketplace (i.e., inflation, fluctuations in demand, etc.)

(9) **Risk and Insurance.** Although the auditor should not be expected to be a technical expert in insurance, he should have a knowledge of insurance essentials and their applications. The auditor's work is associated with examination and appraisal of the insurance program, including the organization's policy and procedures, the effectiveness of cooperation and coordination between organization units in insurance matters, and the identification of the people responsible for making insurance decisions (e.g., insurance coverage, effective dates, etc.)

d. Interviews

A well conducted interview is a very efficient tool for the auditor, since it allows a direct and personal contact between the auditor and the auditee. The auditor should know what information is needed, and he should be prepared to ask a number of direct questions to get the

desired information. During this stage of the audit model, the auditor should begin by stating the purpose of the audit, creating a friendly atmosphere, and focusing on questions associated with the questionnaires that have already been developed and distributed to the department heads. Emphasis should be placed on the facts that are essential to the auditor's review and appraisal of the functional areas under study.

Generally, survey efforts should be directed at locating areas where it appears that time, money, and other valuable resources can be saved. Specifically, these efforts should focus on those areas where a lot of money can be saved at relatively low cost or where changes are easy to implement.

The amount of time that the auditor should devote to the aforementioned areas of analysis depends heavily on the importance and complexity of the matters and the auditor's competence, training, and experience to handle these matters.

2. Summary and Communication of Survey Results

After gathering the survey results, the auditor should put them in a rational sequence. He should summarize them, carefully identify the areas needing further examination, and finally communicate them to the organization's officials.

To facilitate communication and provide a record for future reference, it is a good idea to prepare a summary of the survey, explaining what was done, and briefly presenting the auditor's observations and recommendations for further

work. (Raaum, 1979) According to Raaum, when survey results dictate further review work, auditors should mention in their summary:

- The problems and the rationale for pursuing them in more depth.
- Pertinent information developed during the survey phase.
- Suggested work steps and the reasons for them.
- Preliminary estimates of time and resource requirements-particularly for personnel.
- Target date for completing the reporting phase. (Raaum, 1979)

There are many cases when a survey yields adequate information for some areas studied, so that improvements can immediately be recommended. In these cases, the auditor should discuss the survey results with the responsible managers of the organization being audited before developing a plan for performing a further detailed review. If the officials are satisfied with the auditor's analysis, have the resources, and are willing to act on the recommendations, the survey would be the final report.

C. CRITICAL EVALUATION AND APPLICATION STAGE

The critical evaluation and application stage is the third stage of this audit model. At this point, the auditor should take up his preliminary observations with the responsible managers. If they are willing and have the resources and time to pursue the matters, the auditor may not need to go further into this stage. If the managers are not convinced as to what

they should do but are willing to continue, the auditor should investigate further. Here, the auditor will develop and apply an audit program, focusing mainly on interviews, more extensive on-site observations, and further examination of specific documents. At this point, the author considers it appropriate to recommend the following steps that an auditor of a small NFP may follow during this stage. Of course, the specific elements of these steps vary from audit to audit depending upon the findings, time, and amount of analytical work that should be devoted to accumulate all appropriate supporting evidential material.

1. Preparation and Program Development

During this first step, the auditor should prepare an action plan. The objective here is to find further information about the problem areas which came to light from the questionnaire and the first round of interviews. Here, the auditor and the interested parties should agree on the scope of the engagement needed to achieve the audit objectives and the criteria or standards that are going to be used for evaluation.²

If management has developed, as part of its control system, techniques for measuring or evaluating performance against pretermind criteria, the auditor should inquire into

²Criteria are standards against which the adequacy of performance can be assessed. The auditor must select criteria relevant to the matters being audited that should be reasonable and attainable. (GAO, 1988)

them to see whether he can apply them in his work. (Morse, 1971) If, on the other hand, there are no techniques available, then the auditor must develop his own methods. The first step is to select appropriate measures of performance. The auditor can then set criteria for performance and decide if they can realistically be accomplished by the specific organization under review. If the criteria or standards are not already known, managers, workers, and the auditor should all agree on them. Participation and iterative processes could be the means of selecting mutually acceptable criteria by managers and workers. (Campfield, 1978)

After this, the auditor is ready to carefully and systematically prepare the audit program, including the methodology to be used to collect and analyze data.

2. Application of the Program

Application of audit procedures is the primary phase of this stage. The auditor performs the audit procedures identified in the audit program to gather evidence, make analyses, and draw conclusions. (Guy and Alderman, 1993)

The "Yellow Book" describes the evidence collection techniques that an auditor might use as follows:

- a. **Physical evidence:** Is obtained by direct inspection or observation of (1) activities of people, (2) property, or (3) events. Such evidence may be documented in the form of memoranda summarizing the matters inspected or observed, photographs, charts, maps, or actual samples.
- b. **Documentary evidence:** It consists of created information such as letters, contracts, accounting records, invoices, and management information on performance.

- c. **Testimonial evidence:** Is obtained from others through statements received in response to inquiries or through interviews.
- d. **Analytical evidence:** Includes computations, comparisons, reasoning, and separation of information into components. (GAO, 1988)

The auditor must conduct a second round of interviews. He/she must interview the right people and, based on their responses, identify potential problems. Supervisors and employees may have answers to questions associated with specific problems, causes of these problems, operations, and areas needing further attention. Interviews serve as a way to obtain testimonial evidence. Thus, they should be carefully prepared. The auditor should create a friendly atmosphere by selecting a private, quiet place to conduct interviews. He/she should make a conscious effort to help the auditee to relax and open up by telling him where he has done well. The auditor should start with open-ended questions, in order for the auditee to gain confidence with him/her. After this, the auditor is ready to ask more specific questions. (Hodges, 1978) He/she will be able to encourage a free exchange of ideas, and must be tactful and diplomatic. He/she should not criticize, and should observe the reactions of the interviewee and more closely gauge the validity of the comments. (Fetterman, 1986)

As the auditor sifts through bits and pieces of conversations, problems and questionable areas are exposed and pinpointed for further investigation. It is possible to

supplement the interviews with tests of records. (Linford, 1984) Also, documents such as letters, contracts, and invoices may provide valuable evidence to the auditor.

After sufficient data have been collected, the auditor should have something to compare them against, in order to establish an opinion as to their meaning or value. One proposed method is the comparison of the organization's operating or management practices with "preferred practices." A preferred practice is one that has been found successful or has been found optimal through experience in many organizations over a period of years. The failure to adhere to a preferred practice is an indication that resources may have been wasted or used inefficiently. (Pomeranz, 1976)

As the auditor compares actual data against his knowledge of preferred practices, he will find some that compare favorably and others that do not which will require further action. This action should assess the significance of the deficiency and the effects of the failure to follow a practice that is considered preferred. (Pomeranz, 1976)

Another proposed method is the "dollarization" method. This is "the process of expressing the effect of an operational controls deficiency in terms of money." (Pomeranz, 1976) This method enables a presentation of the cost of resources wasted through failure to adhere to a preferred practice. It also serves to quantify in dollars the magnitude of potential alternatives and opportunities. (Pomeranz, 1976)

After gathering, analyzing, and evaluating the data and accumulating sufficient evidence about the findings, the auditor is ready to prepare his/her report and enter into the last stage of this audit model.

D. REPORTING STAGE

The final stage of this audit model is the reporting stage. The content of the operational audit report depends upon the nature of the organization being audited and the types of problems uncovered. According to Flesher (1984), a typical operational audit report should contain the objectives and the scope of the engagement, general procedures utilized by the auditor, and specific findings and recommendations.

This is the most important stage of the audit because the audit report is the audit product. In this stage, the auditor has already collected all the pertinent information, gathered sufficient evidence, and, using objective judgment, has analyzed the relevant data. Now he/she is ready to draw conclusions and develop recommendations.

The operational audit report should include the description of the job performed, a listing of those areas where there is potential for improvement, and specific recommendations. The report should provide a rationale for the conclusions and recommendations, and it should be addressed to those people who made the arrangements to have the audit performed and have the authority to implement the recommendations. (Pouliot, 1989)

The operational audit report should be discussed with the managers and the department heads. This can happen in an exit interview. The purpose of the exit interview is twofold. It allows the direct communication between auditor and manager by ensuring the accuracy of the facts in the report, and it facilitates acceptance by those who will be affected by it. It is a good idea to enclose with the audit report a summary of the comments of management that were obtained during the exit interview. (Flesher, 1984)

Overall, the auditor must present his/her findings and recommendations in the clearest possible language and in a professional manner. Also, because the report is the platform to convey essential information to the client, it should be produced in a logical way and be submitted as soon as possible after the completion of the audit.

Now, the operational audit model has been presented, and the next chapter will examine its practical usefulness by applying it to a real-life institution.

V. APPLICATION OF THE MODEL

A. PERSPECTIVE

In the last chapter an operational audit model was introduced and discussed. The Community Hospital Foundation in Carmel, California, is the real life institution that was selected to test this model. The author put himself in the role of the auditor and performed an operational audit to test the applicability and viability of the model.

B. INTRODUCING THE NFP

The Community Hospital Foundation (CHF) is located in Carmel, California, and operates the Community Hospital of Monterey Peninsula (CHOMP), the Community Hospital Endowments (CHE), and the Community Hospital Properties (CHP). It is a private nonprofit facility which is fully licensed, accredited, and exempt from income taxes. It is the sole parent of CHOMP, CHE, and CHP, with combined financial statements. CHF coordinates the health care and planning objectives of the related organizations, all of which are nonprofit California corporations, and engages in charitable and educational activities. CHF also manages the Maurine Church Coburn School of Nursing as a joint venture with Monterey Peninsula College.

The hospital began its operations in 1927, when Grace Deere Velie Harris, an heiress to the Deere Tractor fortune,

endowed a hospital in Carmel for research into metabolic disorders and treatment of patients who suffer from them. The Grace Deere Velie metabolic clinic opened in 1930. After financial difficulties in the early '30s, it was converted into a general community hospital in 1934. In 1955, trustees decided that growth of the community dictated construction of a new hospital. With financial support from the community, a 100 room hospital was built in 1962. The hospital was expanded to 172 rooms in 1971. The CHF offers services such as pharmacy, surgery, physical and occupational therapies, cardiopulmonary, dietary, cardiology, oncology, emergency, blood, and birthing center services to 11,500 inpatients and 120,000 outpatients each year.

The CHF's workforce is composed of 1,400 people. Of these, 1,150 are full-time employees and the remaining 250 are part-time employees. Approximately 200 physicians and 380 nurses offer their services to the hospital.

The Board of Directors, which is composed of sixteen people, governs the hospital and sets policy. Of these, twelve members are elected by the community, and the remaining four are appointed by the elected members. Only two board members are physicians.

The Administrator of the hospital is a gentleman with extensive experience in hospital affairs. He has held this position for twenty five years and has a Masters Degree in hospital administration.

The hospital is composed of four departments: planning and research, finance and accounting, nursing, and administration. At the head of each department is a Vice-President (VP) who is responsible for his/her people, since there is no personnel department in the hospital. Each VP has held the same position for over ten years, and three of them have a masters degrees in hospital administration. The VP of the finance and accounting department is a Certified Public Accountant (CPA), with a masters degree in business administration. Exhibit 1 presents the organization chart of the CHF.

The CHF reported net operating revenues of \$98,426,000 and net operating expenses of \$95,484,000 for the year 1991. Thus, there was an excess of revenues over the expenses of \$2,942,000. In 1992, the hospital reported operating revenues of \$107,638,000 and net operating expenses of \$102,285,000. The excess of revenues over expenses from operations was \$5,353,000.

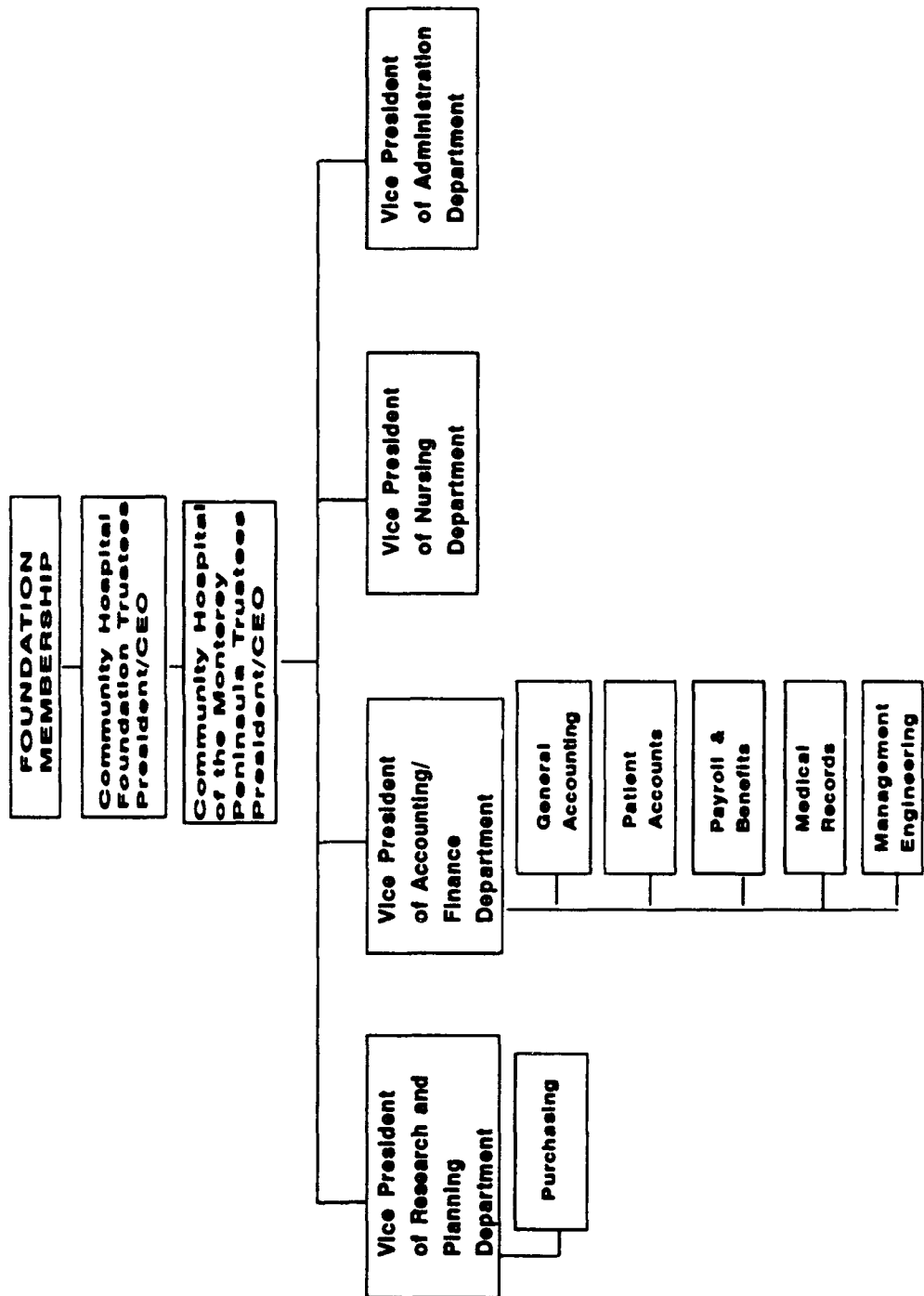
C. FUTURE STRATEGIC ISSUES

CHF's future strategy is to maintain the status quo, at least until any new health care reform is initiated from Washington D.C. It now has 172 beds and operates at 80-85% capacity. With the closing of Silas B. Hays hospital at Ford Ord, it expects to allocate its slack capacity to military patients. There is no plan for expansion in the near term, although depending on the extent of the military demand and

COMMUNITY HOSPITAL FOUNDATION COMMUNITY HOSPITAL OF THE MONTEREY PENINSULA

ORGANIZATION CHART

EXHIBIT 1



the effects of any new health care reforms, expansion plans could be revisited in the future.

Finally, management is taking a hard look at reducing the percentage of services provided, but not paid for. The current strategy is to aggressively seek reimbursement from county and state grants and to increase efforts in getting eligible patients enrolled in Medicare and Medicaid. The current percent of unreimbursed services is 40%. The goal is to get this down to 25%. The important point is that no person needing immediate medical attention will be turned away.

D. APPLICATION OF THE MODEL

The next sections present the results of applying the author's operational audit model in the finance and accounting department of CHF, following the stages dictated by the model:

1. Familiarization Stage

At the outset, the author arranged a meeting through the CHF public relations office. During this meeting, the author introduced himself and explained what he proposed to do. He explained what an operational audit is, presented the proposed audit model, and described the potential benefits to be gained from this type of audit.

Several days later, a meeting with the vice-president of the finance and accounting department was arranged. Although the model in the preceding chapter suggests that the initial meeting be with the Administrator of the hospital,

that was not possible. Thus, the author modified the model plan and had this first meeting with the VP of the finance and accounting department. In this meeting, the author explained that his intention was to perform an operational audit of the four departments, based on a model that was designed to meet their needs. He further explained the benefits of such an audit, the objectives and scope of the audit, and that there was to be no charge for the activities of the auditor. The VP agreed and advised the author to send a letter to him in order to obtain permission from the administrator and the board of directors to conduct the audit. A few weeks later, the author received permission to conduct the audit, but to confine its scope to the finance and accounting department.

The accounting department is composed of five divisions: general accounting, patient accounts, payroll and benefits, medical records, and management engineering. There are 96 people working in this department. Of these, 19 are working in general accounting, 45 in patient accounts, four in payroll, 25 in medical records, and three in management engineering.

During the initial session between the author (auditor) and the VP, they agreed that the VP would be the contact point, a tentative schedule was proposed, and the operating ground rules were discussed and agreed to. Also, they agreed to extend the scope of the audit to include the purchasing function. This function is under the umbrella of

the research and planning department and has eleven people in its workforce. The auditor introduced the questionnaire and discussed the methodology for administering it and explained its purpose. Finally, the VP gave his consent to begin the audit.

Regarding the auditor's qualifications, the author believes he meets the technical and personal qualifications discussed in previous chapters. He took a course in Internal Control and Auditing during his studies at the Naval Postgraduate School as a financial management student and has prior experience performing internal audits for food service operations for many ships, managing the accounting operations of a naval shipyard, and providing inventory management of as many as 10,000 line items in the Hellenic Supply Center. The auditor offered this information about his background and experience when he introduced himself to the VP.

During the initial sessions, the VP provided the auditor with an official organization chart and explained how he viewed the responsibilities of all divisions, their operational activities, and how their roles fitted into the hospital as a whole. He was aware of several situations in his department that needed further attention.

Following his model, the auditor asked to take a physical walk-through of the department, because it would provide him with the opportunity to view the entire operation and obtain an overall impression of the department. During

this tour, the auditor had the opportunity to meet the managers of each division. He explained the reason, purpose, and scope of the audit and discussed the description of the operational activities and the broad policies, goals, and objectives of their divisions. The auditor had the opportunity to directly observe the operation and talk with some employees of each division.

Finally, the analysis of current business literature permitted comparative analysis of the audited hospital with other NFP hospitals in the same geographical area. Specifically, the auditor reviewed The Financial Analysis Service (Hospital Financial Management Association, 1992) and the annual Center for Health care Industry Performance Standards (Health care Financial Management Association, 1992). Both are available on a subscription basis and extremely important for many hospitals.

The auditor examined financial ratios for the current year, for previous years, and for the industry as a whole, as these ratios can be useful tools in helping the auditor to spot trends of increasing or decreasing efficiency. The auditor utilized liquidity ratios such as the current ratio, days cash on hand, and net days in accounts receivable. He also utilized the debt-equity and return on equity ratios. Table 7 provides a comparison of these ratios for the CHF over the last three years. Table 8 offers a comparison of the same

TABLE 7**RATIO COMPARISON OF CHF FOR YEARS 1990-1992**

RATIOS	1990	1991	1992
CURRENT RATIO	2.3	2.2	1.8
DAYS CASH ON HAND	13	27	20
NET DAYS IN ACCOUNTS RECEIVABLE	87	82	69
DEBT EQUITY RATIO	0.2	0.19	0.17
RETURN ON EQUITY	0.58	0.80	0.83
SOURCE: Information provided by VP of finance and accounting of CHF, October 15, 1993.			

TABLE 8
RATIO COMPARISON WITH SIMILAR HEALTHCARE
ORGANIZATIONS FOR 1991

RATIOS	CHF	FAR WEST	CALIFORNIA	S&P
CURRENT RATIO	2.2	1.9	1.8	2.5
DAYS CASH ON HAND	27	13	15	27
NET DAYS IN A.R.	82	72	76	73
DEBT EQUITY RATIO	0.19	0.65	0.64	0.44
RETURN ON EQUITY	0.8	0.88	0.89	0.7
SOURCE: Information provided by the VP of finance and accounting department of CHF, October 15, 1993.				

ratios of the CHF with those of similar institutions within the following three groups in the same geographical area:

1. Far West is an organization of hospitals with bed sizes between 100 and 199, located in the far west region of the U.S. CHF is one part of its 80 members. The Far West ratios in Table 8 are the median ratios for these facilities.
2. The California health care organizations comprise a group of 130 members. The ratio used for comparative purposes is the median ratio for this group.
3. The S&P organizations are facilities that have been rated AA by Standards and Poors. This is the highest rating given to health care institutions. There are 22 members in this group.

The auditor reviewed these ratios and asked the managers about their understanding of them. They responded that they use these ratios to keep track of, compare, and measure the financial performance of the hospital. The auditor also reviewed written policies, procedures manuals, and job descriptions to determine the hospital's management practices.

By examining and reviewing the aforementioned areas, the auditor obtained an adequate working knowledge of the objectives, procedures, and controls of the department and then entered into the diagnostic stage of his operational audit model.

2. Diagnostic Audit Stage

In this stage, the auditor utilized the survey methods described in Chapter IV. The first step was to review the management reports. They are the sources of information on progress, status, and accomplishment of work. The auditor

reviewed budgets and department cost reports to obtain an understanding of how well goals are being achieved. The auditor also inquired as to who prepares each report, who receives it, and how valid and useful is the information it provides.

The auditor asked for any previous internal auditors' reports, because he believed that they could help to reduce survey time and identify findings on which management had not acted. The VP explained, however, that the hospital had never utilized an internal auditor in the past. The auditor explained that using an internal auditor on a full time arrangement will provide regular reviews of operating effectiveness and efficiency, as well as occasional investigations of matters of concern to management. The CHF hired a public accounting firm to audit the annual financial statements, and the auditor examined these reports for the last three years.

After that, the auditor asked the VP of finance and accounting to complete the questionnaire. The auditor had already introduced it and explained its purpose during the familiarization stage of the audit model. As the VP filled it out, he had discussions with the auditor about specific questions.

Based on the questionnaire responses and the interview with the VP, the auditor and the VP considered it appropriate to concentrate attention on eleven specific questions. The

number in the front of each question correspond to the question number in Appendix A. A substantial discussion of each one is offered during the next stage of the audit model.

- A5: Is equipment (fax, copying machine, etc.) use controlled?
- B3: Have steps been taken to provide assurance that the established procedures are being followed?
- C8: Does your department use work schedules?
- E4: Are employees in need of supervision?
- E16: Is it hospital policy for all employees to take annual vacations?
- E17: Is the work of a person on vacation performed by someone else during their absence?
- F13: Are monthly purchase reports prepared?
- G4: Do you know the total cycle times needed for inventory replacements, particularly for critical items?
- G5: Have you determined the level of safety stock for each item?
- H4: Is the cost system used in budget preparation or forecasting other data?
- H8: Are price concessions employed in an attempt to gain volume and maximize overall return?

Following the design model, the auditor interviewed the VP and the six division managers. Initially, he asked open-ended questions, such as:

- What is your job?
- What takes up most of your time?
- What are the biggest obstacles you face in doing it?

Since these questions were easy to answer, the auditor gained confidence and established rapport with the interviewee. After that, the auditor entered into specific questions associated with the questionnaire and specifically with the eleven questions listed above.

3. Critical Evaluation and Application Stage

Because the VP and the division managers had a lack of resources, particularly time available to pursue the matters, they asked the auditor not to investigate those eleven questions by applying a full audit program. Being sensitive to their commitments, the auditor agreed and did not develop this stage fully as envisioned in Chapter IV. Therefore, a partial application of this stage was performed. The auditor believes that his tests provide a significant analysis of the effectiveness and efficiency of the organization and its management systems.

The eleven questions listed earlier are discussed below. In three cases, two related questions are addressed together.

a. Is equipment (fax, copying machine, etc.) use controlled?

When the auditor observed the copying and fax machines during the physical tour, they were not in use. Interviews and discussions with the VP revealed that there are no records or devices to provide control over use of this equipment. This lack of internal control could make it possible for an employee to make copies of a personal tax

return or a cookbook at CHF's expense and leave without recording the nature of the work copied or who authorized such copying. This could indicate an undesirable and costly problem. A recommendation was made that a monthly tabulation of copy machine use would help determine whether a problem exists.

There are no records kept of the reason for sending faxes. If a permanent record was maintained, the likelihood of unnecessary faxes could be reduced. The auditor's recommendation was the creation of a record of usage by putting the cover sheets in a box next to the fax machine after transmission. This cover sheet includes the names of the user and receiver and the number of pages sent.

- b. Have steps been taken to provide assurance that the established procedures are being followed?

This question considers the extent to which the department is in compliance with established procedures. There is a procedures manual, and a random sample of 18 employees of the department who talked with the auditor seemed to be informed of the methods and procedures for performing their duties, and they were also aware of hospital policies pertinent to their tasks. Choosing the payroll division as one of the more procedural and day-to-day operational area, the auditor found that there was compliance with established policies and procedures. Specifically, the department heads of the CHF sign and approve the time cards and time records before they are sent to the general accounting division for

processing. The payroll clerks use the cards and records in compiling the payroll for the period and to develop labor statistics of various types.

Having to prepare and distribute checks (prenumbered) for 1,400 people twice a month, the four employees of the payroll division are working in a pressure environment. They use annually about 300 overtime hours/clerk to complete the payroll. The reaction of those employees to the overtime issue was mixed. Several commented that overtime created a stressful environment, while others overlooked the stress in favor of the additional income.

As an alternative, additional manpower (part-time, Accountemps, or internal reallocation) should be considered. It could save on labor costs and create a less stressful workplace.

c. Does the department use work schedules?

The auditor here examined if the existing work schedules are reliable and predictable. A simple review of such schedules revealed that the division managers are responsible for determining which jobs their employees have to perform. For this reason, a daily schedule of approved regular jobs is furnished, and an employee obtains approval for any job request that is not scheduled. The auditor compared history logs with the schedules and approval slips to verify that only approved jobs were performed.

d. Are employees in need of supervision?

In the CHF's accounting department, the nine working supervisors have little time or opportunity to observe their employees. Observation of employees on a daily basis, combined with a review of supervising schedules, confirms this.

The nine supervisors are not able to exercise continuous and close supervision over the 82 employees working in a variety of occupations at many different locations within the department. The auditor's conclusion, however, based on discussions and direct observation, was that there was no evidence that employees did not properly perform their duties. Thus, constant supervision seems neither practicable nor necessary.

e. Is it hospital policy for all employees to take annual vacations? Is the work of a person on vacation performed by someone else during their absence?

These questions are examined together because there is considerable overlap between them.

The auditor concluded, based on discussions with employees and the VP, that there is no mandatory annual leave policy. The existence of such policy could ensure that no one person continually and exclusively performs a particular function. If employees are required to take vacations annually and if some one else does their work while they are away, they would be less likely to be tempted to commit fraud, and any actual fraud would be more likely to be detected.

The auditor observed that there was an increased work load when some employees are absent. In one particular instance, employees noted that their inability to handle the increased work load due to a colleague's absence was a reflection of inadequate cross-training. The lack of cross-training is contrary to good internal control practice. Formal employee training programs are important in hospitals. Explanations of the hospital's policies and procedures provided an understanding and appreciation among employees of the contribution each makes to the overall hospital. With appropriate training, job rotation becomes possible as a means of providing variety, improving employee performance, and adding versatility. Also, employees are motivated by the possibility of moving upward into positions of greater responsibility. The cross-training purpose is threefold: spreading the work load, preventing fraud, and preparing employees for promotion. The auditor's recommendation was that, since CHF is left without critical skills when an employee is absent, the "indispensable employee" situation can be eliminated through cross-training, with annual leave coverage providing practical experience.

f. Are monthly purchase reports prepared?

A fruitful point of investigation for an operational auditor is the examination of the documentation that stimulates buying action. From interviews and direct observation, the auditor found that each purchase is authorized by

the VP or a division manager in the requisitioning department. Every purchase over \$200 must be authorized by a VP. For purchases under this amount, the division manager has approval authority. They keep track of the expenditures in their monthly budgets. Capital expenditure purchase decisions are always approved by the Board of Directors under a separate procedure.

The purchasing division sends a monthly list of the purchased items to the accounts payable division. There are no formal purchasing reports. A lack of such reports was sufficient to document this finding, which was confirmed by interviews with the purchasing and accounts payable division managers and the VP. The auditor's recommendation was to establish a formal purchasing reporting system to inform the customers (departments) about the status of their requisitions and save the purchasing personnel's time answering questions about the status.

Another finding was that the purchasing activity is under the same umbrella as receiving. Because of the role of the receiving activity in the process leading to payment of vendors, it is very important that it be carried out by an independent receiving activity. From an internal control standpoint, independence from the purchasing activity minimizes the risk of someone in the purchasing division placing an order and then receiving the items and taking them for personal use. The auditor's recommendation was to

segregate the duties among the eleven people and specify their roles, responsibilities, and relationships among them.

- g. Do you know the total cycle times needed for inventory replacements, particularly for critical items? Have you determined the level of safety stock of each item?

This section addresses two issues: how much to order and when to order. By using economic order quantities (EOQ), reorder point (REP), and safety stock techniques, the hospital inventory can be maintained at optimum levels. The department heads, based on past experience and current budgets, are aware of average demand and of the possibilities that various quantities will be used in excess of average demand during a given time period. Interviews with the VP and the purchasing division manager, as well as discussions with data processing personnel and inquiry about computer use, provided sufficient evidence to verify the finding that the CHF partially employs demand analysis and economic order quantities, reorder point, and safety stock techniques for many critical or high usage items.

However, there is a lack of safety stocks and reorder thresholds for other items. Demand data should be used to set reorder thresholds for all items to ensure that necessary supplies are always available and to enable CHF to take advantage of volume discounts.

- h. Is the cost system used in budget preparation or forecasting other data? Are price concessions employed in an attempt to gain volume and maximise overall return?**

There is a cost accounting system being utilized which was developed by two main vendors. Currently, the CHF determines its cost through a general ledger system. This system accumulates the direct costs, while the cost accounting system allocates those direct costs by service to the revenue centers. These centers, which include the nursing floors, the laboratories, the x-ray, inpatient and outpatient surgery, and rehabilitation, are the only centers that have prices. The hospital employees use forecasting data and set prices by using 3-5% of annual net revenue as the bottom line objective. Each revenue center determines its expenses, contractual discounts, bad debts and charity care costs and then adds its proportionate share of the 3-5% target profit margin in order to set its prices. Those prices are then incorporated into the price master. This price master is the official list of charges for services and tests. It is annually updated by the board of directors based on an annually assigned increased rate (8% increase for 1993 over 1992), determined from inflation and the volume of services not paid by the government under the Medicare program.

CHF operates in a comparative monopoly on the Monterey Peninsula. The nearest civilian competition is 30 miles away. The large volume of unpaid services (40% of total costs) drives the charges to paying customers (primarily

insurance companies) up by 87½ above the prices of the same services if everybody paid full price for their health care.

1. Summary of Audit Findings

In summary, the findings were as follows: (a) There is no control over the copying machine. (b) Everyone in the department has access to the fax machine. (c) An internal auditor has never been utilized by the hospital. (d) The purchasing activity is under the same umbrella as the receiving. (e) There are no formal purchasing reports prepared. (f) There are no resupply procedures for many items. (g) There is a lack of cross-training and annual leave policies. (h) The payroll division appears to be understaffed. The auditor communicated these to the VP of the department.

4. Reporting Stage

The auditor has collected all pertinent information, gathered adequate evidence, and, using objective judgement, has analyzed the data obtained during the aforementioned audit stages of his model.

The auditor's overall assessment of the department was positive. It is managed and staffed by high-caliber personnel who display a high degree of effectiveness and efficiency in performing departmental operations. Management's prompt and thoughtful response to departmental affairs evidences a commitment to excellence.

Ratio analysis showed that the CHF has strengthened its already strong financial position over the last three

years. Last year, the analysis indicated that the CHF was very liquid and has significant additional debt capacity. The one area that has been unfavorable compared to the rest of the industry was the days in accounts receivable. CHF's ratio³ was relatively high through 1991, but in 1992 it has dropped dramatically. If this trend continues, it may be enough to bring the hospital below industry averages. However, the health care industry, in general, has seen a drop in this ratio during 1992 due to the increased emphasis on collections.

The aforementioned findings and recommendations were discussed with the VP of the finance and accounting department in an exit interview. He agreed that these recommendations could improve the operation of his department. He also agreed that the recommendations vary with respect to the level of difficulty in implementation, urgency, visibility of benefits, required investment in facilities and equipment, and additional personnel entailed; these difficulties should be considered in deciding on a course of action. The implementation of these recommendations will determine the overall impact of the audit on the hospital.

Finally, with the VP's consent, the final report was submitted and released. The final auditors' report is shown in Appendix B. The last chapter will discuss the conclusions

³Net days in A/R is the amount of Net Patients Accounts Receivable divided by the ratio of Net Patient Service Revenue to 365 days (or the average daily revenue).

and recommendations, with a final evaluation of the audit model.

VI. CONCLUSIONS AND RECOMMENDATIONS

In the previous chapters, the auditor concluded that operational auditing is a useful and viable tool, applicable not only to for-profit organizations but also to NFPs as well. It was advocated that their managers need some kind of system for the detection of potentially destructive problems and opportunities for improvement. Operational auditing is such system. Despite organizational complexity, communication network sizes, and financial commitments, management can maintain the efficiency and effectiveness of their operations by utilizing this technique. Of course, operational auditing by itself is not a panacea, nor a remedy to solve all the managerial problems of the NFPs. The managers of these organizations should adapt and utilize, in conjunction with operational auditing, other techniques to perform their jobs better.

The research into and implementation of operational auditing in a particular NFP organization provided a number of lessons learned for this researcher. Specifically, the author's effort focused on developing an operational auditing model to cover some NFPs needs. The model is composed of four stages: the familiarization stage in which the auditor obtains a general overview of the NFP to be audited; the diagnostic audit stage in which auditor's efforts focus on data

collection, analysis, and interpretation; the critical evaluation and application stage in which the focus is on areas needing further attention and which utilizes an audit program to further penetrate into the problem areas; and the reporting stage which represents the audit product by indicating the conclusions and recommendations. This model provides an auditor with a framework in which to work. That framework, combined with the suggested audit program, provides the necessary groundwork for the operational audit. The value of this model lies in revealing problem areas, specifically those that should receive immediate management attention. Once the basic problems have been identified and corrective measures taken, then the model itself should be evaluated to determine its suitability and to ascertain if modifications are required to enhance its ability to identify problems or trends. The model is "not cast in stone", not a "thing unto itself." It is not a static tool. It is an ongoing, dynamic, and iterative process, a guideline that must be modified according to the unique circumstances to meet specific requirements and expectations.

To assist in conducting an effective operational audit, an audit questionnaire is very useful. The questionnaire that this model employed provides flexibility, so that it may be adapted by any organization. Its inherent flexibility encourages tailoring and improvement, so that it fits the audit needs of all NFPs. Its focus is to obtain a general

knowledge of various managerial functions and identify problems in several areas of concern. However, the questionnaire need not be limited to an analysis of management. Professional and technical aspects could be included. It would be preferable not to apply a general questionnaire, but to construct a unique questionnaire for each type of NFP being audited.

Relying on the preceding model and questionnaire, the author put himself in the role of the auditor and performed an operational audit in the Finance and Accounting Department of the Community Hospital Foundation. The author's belief, derived from the application of the model, is that there is evidence that it considerably contributed to improving the operations of this department. Although its application was not as fully developed as envisioned in Chapter IV, the author (auditor) was able to incorporate and apply the majority of the model. The favorable findings, with only partial implementation, suggest that full and complete application could have provided even greater benefits to the user.

With the operational audit model described in this study as a guide, a prospective operational auditor, whether internal or external, should have no difficulty in performing a thorough audit. Using the suggested framework, plus the accompanying questionnaire modified appropriately, permits a systematic study of problems in all types of NFPs. Although operational auditing has been defined as the application of

common sense to a business situation, the auditor does need some type of format to follow when performing the audit. This model, however, demonstrates that there is enough commonness among client organizations to warrant the expenditure of time and effort to prepare an operational auditing model for most types of NFPs.

APPENDIX A
QUESTIONNAIRE

This questionnaire was not designed exclusively for any particular organization. It was meant to serve all Not-For-Profit (NFP) organizations. Because of this, some areas may not be as applicable to your organization as you feel they should be. In the space below those questions, please indicate "Not applicable."

If it is possible, write a short statement of why you feel it does not apply to you, or what alternative is being used in your department. Feel free to add any additional comments which might help me better understand your operation(s).

Your assistance is greatly appreciated.

THANK YOU FOR YOUR TIME

QUESTIONNAIRE				
QUESTION		ANSWER		
		YES	NO	REMARKS
A.	FACILITIES			
1.	Are the physical facilities of the department adequate?	X		
2.	Are physical conditions of the department satisfactory?	X		
3.	Is there an adequate amount of office equipment available in the department?	X		
4.	Are machines and equipment being used at an efficient level of capacity?	X		
5.	Is equipment (fax, copying machine, etc.) use controlled?		X	
6.	Has your department developed data to support requests for new or expanded facilities or equipment as needed?	X		
7.	Is the department easy to reach by the public and other hospital employees?	X		
B.	PROCEDURES			
1.	Is there any program-formal or informal-of-new employee orientation and training?	X		Monthly basis
2.	Is there a procedures manual for the department?	X		
3.	Have steps been taken to provide assurance that the established procedures are being followed?	X		Manager Resp.
4.	Are problems that affect work discussed with the department heads of the area that is involved?	X		Also with Rehab.
C.	PLANNING & BUDGETING			
1.	Are the objectives of your department formally coordinated with the overall objectives of the organization as a whole?	X		
2.	Does the department prepare an annual budget?	X		

QUESTION		ANSWER		
		YES	NO	REMARKS
3.	Are budgets prepared by the people responsible for meeting them?	X		
4.	Are you satisfied with the budget approval process that your department goes through?	X		
5.	Are written budgets changed when future plans are changed?	X		As changes/monthly
6.	Is your budget used to control the amount and rate of expenditures?	X		
7.	Are actual vs. budget reports prepared?	X		Monthly
8.	Does your department use work schedules?			Flex Dept's
9.	Is most work that is done planned and scheduled? About what percentage? 90%	X		
10.	Is every job in progress reviewed against the schedule regularly?	X		But for the important requests only
D.	COMMUNICATION			
1.	Do managers in your department generally feel they are provided with the information they need to fulfill their responsibilities and exercise their authorities properly?	X		Through computer E-mail
2.	Are communication channels generally free and open? For example, can personnel readily obtain information from the nearest available source without regard to organization or chain-of-command lines?	X		Unless confidential
3.	Is there an open line of communication between your department and the individuals to whom you report?	X		
4.	Is the communication between your department and other departments satisfactory?	X		
5.	Do you feel that you are provided with all information you need to fulfill your responsibilities?	X		
6.	Do senior managers meet with lower levels on a regular basis, formally or informally?	X		Monthly

QUESTION		ANSWER		
		YES	NO	REMARKS
7.	Is there a bulletin board available for communication of information to employees?	X		Near cafeteria
8.	Do you know the amount of budget available for each department in the hospital?	X		
9.	When policy is changed; is the change relayed first to managers and then to their staff?	X		
10.	Do you feel that your department has a good public relations image?	X		
E.	PERSONNEL			
1.	Is the department adequately staffed?	X		
2.	Do department employees have a good attitude about their job and the organization?	X		
3.	Are job descriptions available for each job?	X		
4.	Are employees in view of supervision?		X	Not always
5.	Do personnel give evidence of knowing the organization's procedures, policies, rules, or regulations?	X		
6.	Do key employees have their own job descriptions and copies of those of their subordinates?	X		
7.	Do the job descriptions clearly specify major responsibilities and authorities?	X		
8.	Are all tasks necessary?	X		
9.	Do you feel that everyone in your department has a thorough understanding of his/her job?	X		
10.	Are reviews of position activities made periodically, and are job descriptions updated?	X		Annually
11.	Are employees regularly informed as to the state of the business, hospital needs and future developments?	X		

QUESTION		ANSWER		
		YES	NO	REMARKS
12.	Are the employees in your department and the other departments with which you are familiar well qualified to perform the duties that are required of them?	X		
13.	Are checks made to see that employees generally are receiving adequate instruction to enable them to do their jobs satisfactorily?	X		
14.	Does the hospital maintain adequate personnel files; that is, is a record kept for each employee on an up-to-date and comprehensive basis?	X		
15.	Is there a centralized personnel function through which all applicants must pass?		X	No personnel department
16.	Is it hospital policy for all employees to take annual vacations?		X	
17.	Is the work of a person on vacation performed by someone else during their absence?		X	Not necessarily
18.	Does the organization have any kind of formal performance appraisal program?	X		
19.	Do you know how your department's turnover and absentee rates compare with those of other departments?	X		Quarterly
20.	When a Vice-President asks for additional staff, is his/her request evaluated on its merits as well as on its impact on his/her departmental budgets?	X		
21.	Does the hospital subscribe to any magazines for the education of department employees?	X		
F.	PURCHASING			
1.	Is a department or a single organization unit engaged in purchasing?	X		
2.	If no, is the purchasing function completely decentralized? If yes, identify responsibilities and describe the purchasing system used.	X		

QUESTION		ANSWER		
		YES	NO	REMARKS
3.	Does the present degree of centralization or decentralization of purchasing appear justified? If no, list reasons why.	X		
4.	Are there written purchasing policies?	X		
5.	Have purchasing procedures been documented?	X		
6.	Does the purchasing department actively pursue cash discounts?	X		
7.	Have purchase quantity levels been established in connection with inventory control to assure economic ordering?	X		
8.	Have dollar-purchase approval limits been established?	X		
9.	Are there uniform purchasing standards for the hospital, so that all departments are treated equally?	X		
10.	Do purchase orders normally include prices?	X		
11.	When inventory is ordered, is consideration given to large enough quantities that might result in cost savings?	X		
12.	Do you make purchases from several sources to ensure a steady source of supply?		X	Not necessarily
13.	Are monthly purchase reports prepared?		X	
14.	Do you know how these reports are used? Who uses them? How?		X	Not prepared
15.	Are purchase orders blanks prenumbered?	X		
16.	Are only department heads (or other designated persons) permitted to requisition materials?	X		
17.	Has an efficient timetable been established for routine ordering of supplies by the departments, so that the work of filling orders can be distributed throughout the week?	X		

QUESTION		ANSWER		
		YES	NO	REMARKS
G.	INVENTORY CONTROL & MANAGEMENT			
1.	Do you feel that there are adequate controls for getting received materials to where they are needed in a timely fashion?	X		
2.	Are there adequate records to trace material from the time of its receipt until it reaches the accountable user?	X		
3.	Do adequate procedures exist for handling damaged materials?	X		Purchasing Agent responsible
4.	Do you know the total cycle times needed for inventory replacements, particularly for critical items?		X	
5.	Have you determined the level of safety stock for each item?		X	For most common ones - yes
6.	Are physical inventory checks conducted on an interval basis?	X		Quarterly
7.	Does storage space appear adequate?	X		
8.	Do you maintain thorough life-time records of accumulated costs for all plant and equipment items?	X		
9.	Are items that are radioactive, perishable, or require controlled temperatures always delivered immediately to the user?	X		
H.	COST & PRICING			
1.	Can your department reasonably estimate the cost of a job or process before it is begun?	X		NA to Hosp.
2.	If yes, do cost estimates show both hours & dollars?	X		NA to Hosp.
3.	Are actual costs reported? If yes, are they compared with estimates or standards?			NA to Hosp.
4.	Is the cost system used in budget preparation or other forecasting data?		X	

QUESTION		ANSWER		
		YES	NO	REMARKS
5.	Are the organization's prices less than the prices of other local hospitals? If no, are they equal to or higher than other local hospital prices?	X		
6.	Is cost-plus the only criterion used to set prices?	X		
7.	Does the organization monitor competitive prices on a frequent basis?	X		
8.	Are price concessions employed in an attempt to gain volume & maximize overall return?		X	No discounts given - other than gov't
I.	RISK & INSURANCE			
1.	Are all tangible assets, fully insured?	X		
2.	Are risk reduction possibilities made known to management?	X		
3.	Are claims handled quickly and efficiently?	X		
4.	Does the person who handles the insurance negotiate with more than one company when arranging insurance coverage?	X		
5.	Does your organization have adequate insurance coverage to meet the inflated cost of replacing its tangible assets?	X		
6.	Does your organization have adequate public liability insurance?	X		
7.	Are deductibles used in your insurance policies?	X		
8.	Are key personnel of your organization covered by life insurance that protects the organization in case of their demise?	X		
9.	Has your organization considered a variety of insurance plans as part of fringe benefits for your employees?	X		
10.	Are there coinsurance clauses in your policies?	X		

APPENDIX B
AUDITORS' REPORT

This report is addressed to the Vice-President (VP) of Finance and Accounting, Community Hospital Foundation (CHF). The operational audit model that was designed and used by the auditor encompassed the following functional areas of the CHF: facilities, procedures, planning and budgeting, communication, personnel, purchasing, inventory control and management, cost and pricing, and risk and insurance.

The Finance and Accounting department and purchasing division were selected for an in-depth study. This report is limited to problem areas encountered in those two areas.

The operational audit involved interviews with management personnel. The auditor also reviewed and evaluated appropriate documents, files, reports, systems, policies, and procedures. After objectively evaluating the data obtained during the Diagnostic Audit Stage of the auditor's operational audit model, conclusions and recommendations were developed and discussed with the VP of the accounting department. The accounting department concurred with these findings and recommendations.

Findings and Recommendations

This report includes recommendations based on the auditor's judgement that would most likely bring about improvements in the operations of the accounting department. It should be noted that the recommendations vary with respect to the level of difficulty in implementation, urgency, visibility of benefits, investment in facilities and equipment, and additional personnel entailed. These difficulties should be considered in deciding on your course of action.

Specific Findings

1. A monthly tabulation of copy machine use would help determine whether a problem exists. If there is wasteful usage, some control should be placed over the use of the copying machine.
2. No records are kept of the reason for sending faxes. If a permanent record was required, the number of unnecessary faxes might be reduced. Create a record of usage by putting the cover sheets in a box next to the fax machine.
3. An internal auditor is not utilized. The accounting department may consider using the internal auditor to examine the problem areas identified in this report. The external auditors satisfy external reporting requirements and regulatory needs. Filling an internal auditor's position will help the accounting department be more efficient.
4. The purchasing activity is under the same umbrella as receiving. Segregate these duties between different people.
5. There are no formal purchasing reports prepared. The purpose of these reports is to keep the customers informed about the status of their requirements and save time for the purchasing personnel in answering questions about requisition status.

6. There are no resupply procedures for many items. Demand data should be used to set reorder thresholds to ensure critical supplies are always available and enable CHF to take advantage of volume discounts.
7. The lack of cross-training and mandatory annual leave policy is contrary to good internal control practice. CHF is left without critical skills when an employee is absent (leave, emergency, termination). The "indispensable employee" situation can be eliminated through cross-training, with annual leave coverage providing practical experience.
8. Possible understaffing of the payroll and benefits division is indicated by excessive overtime for accounting staff. Additional manpower (part-time, accountemps, internal re-allocation, new full-time staff; as appropriate) could save on labor costs and create a less stressful workplace.

The accounting department is staffed with highly talented, capable personnel. However, the department could improve its service to the hospital. If the aforementioned problems are solved, the contribution of the accounting department will be significantly enhanced.

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